P.A.C. No. 668

# PUBLIC ACCOUNTS COMMITTEE (1978-79)

(SIXTH LOK SABHA)

## HUNDRED AND NINTH REPORT

## DEFENCE SERVICES

## MINISTRY OF DEFENCE

**[Paragraph 10 of the Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services) relating to Production of Vehicles in Ordnance Factories]**

*Presented in Lok Sabha on 22 December 1978*
*Laid in Rajya Sabha on 22 December 1978*

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| 64 | | 1 Under Column 4 | 16-78 | 16-18 |
| 66 | | 1 Under Column 2 | 1.103 | 1.109 |
| 69 | | 10 Under Column 4 | maching | machines |
| 69 | | 11 Under Column 4 | anxiety | anxiety |

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Shri Bipin Behari—*Senior Financial Committee Officer.*

## INTRODUCTION

I, the Chairman of the Public Accounts Committee, as authorised by the Committee, do present on their behalf this Hundred and Ninth Report of the Public Accounts Committee (Sixth Lok Sabha) on paragraph 10 of the Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services) relating to Production of Vehicles in Ordnance Factories.

2. The Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services) was laid on the Table of the House on 6 May, 1978. The Public Accounts Committee examined the paragraph at their sittings held on 11 July, 1978 and considered and finalised this Report at their sitting held on 19 December, 1978.

3. A statement containing main conclusions/recommendations of the Committee is appended to this Report (Appendix). For facility of reference these have been printed in thick type in the body of the Report.

4. The Committee place on record their appreciation of the assistance rendered to them in the examination of these paragraphs by the Comptroller and Auditor General of India.

5. The Committee would also like to express their thanks to the Ministry of Defence for the cooperation extended by them in giving information to the Committee.

NEW DELHI;

*December* 21, 1978.

*Agrahayana* 30, 1900 (*S*).

P. V. NARASIMHA RAO,

*Chairman*,

*Public Accounts Committee.*

## REPORT

## PRODUCTION OF VEHICLES IN ORDNANCE FACTORIES

*Audit Paragraph*

1.1. Shaktiman and Nissan vehicles were being assembled in an Ordnance Factory 'A'—Shaktiman 3-ton from 1959, Nissan 1-ton from 1960 and Nissan Patrol from 1962—in collaboration with foreign firms 'X' and 'Y'. Agreements with firm 'X' for manufacture of Shaktiman 3-ton and with firm 'Y' for manufacture of Nissan 1-ton vehicle had been concluded in September, 1958 and February, 1960 respectively; the latter was later extended in December, 1961 to cover manufacture of Nissan Patrol. Such components of the vehicles as could be produced indigenously were being obtained from different Ordnance Factories, largely by utilising the existing surplus capacity, and from trade. Following the Chinese aggression in 1962, the feeder factories had to undertake other priority items and, besides large deficiencies in the holding of vehicles were revealed. It was, therefore, considered necessary to augment the facilities for manufacture of vehicles and to centralise these along with component manufacturing capacity in a self-contained unit. The existing facilities in other Ordnance Factories (including 'A'), used exclusively in the manufacture of these vehicles, were also to be transferred to this unit.

1.2. In November, 1965, Government sanctioned the setting up of factory 'B' at an estimated cost of Rs. 32.06 crores with facilities for annual production of 13,200 Shaktiman and Nissan vehicles (6,000 Shaktiman, 4,200 Nissan 1-ton and 3,000 Nissan Patrol). The sanction was subsequently revised twice—once in December, 1970 to Rs. 41.53 crores and again in January, 1973 to Rs. 46.84 crores. The revisions were necessitated due to—

(a) cost of procurement of additional plant and machinery not provided for in the sanction of 1965;

(b) increase in the cost of procurement of plant and machinery already provided for in the project sanction of 1965; and

(c) cost of machines planned originally for transfer from other factories but which could not ultimately be spared.

1.3. At the planning stage, a total requirement of 22,000 Shaktiman vehicles, 32,900 Nissan 1-ton vehicles and 14,900 Nissan Patrol for the years 1966 to 1973 was projected by the Army, the maximum requirement in a year being 3,800 Shaktiman vehicles, 4,300 Nissan 1-ton vehicles and 2,400 Nissan Patrol. The decision to set up capacity for 13,200 vehicles per annum, although in excess of the Army's requirement, was taken in order to obtain advantage of economics of scale. The plan also envisaged production of a civil version of the Shaktiman vehicle and generation of sufficient market demand for the Nissan vehicle to make use of the higher capacity.

1.4. The factory was expected to commence production after 3 years from the date of sanction of the project (*i.e.*, November, 1968) and reach full production after 4½ years in all (*i.e.*, may, 1970). It was also expected that the factory would achieve 90 per cent indigenous content in both Shaktiman and Nissan vehicles in the fifth year from the sanction of the project (*i.e.* 1970-71). The time schedule laid down for commencing production and achieving full target capacity could not, however, be adhered to.

1.5. The assembly of Nissan Patrol, Nissan 1-ton and Shaktiman vehicles commenced in factory 'B' in June, November, 1970 and March, 1972 respectively. While transferring the assembly line of Nissan 1-ton vehicles from factory 'A' to factory 'B', 346 vehicles held by the former were also transferred to the latter for issue to the Army. Though full expenditure on all operations provided for in the estimates had been incurred on these vehicles by factory 'A', it was found, when these were tested at factory 'B' before issue to the Army, that some items pertaining to engine, gear box, body, drivers' seat etc. required replacement, besides other minor adjustments and repairs. Factory 'B' had to spend Rs. 18.88 lakhs on these vehicles to make good deficiencies of which the cost of items replaced was about Rs. 15 lakhs.

1.5.(A) The requirements indicated by the Ministry of Defence in March, 1973 for the years 1973-74 to 1976-77, the production programme assigned to the factory by the Director General, Ordnance Factories and the actual production achieved during these years

are shown below:

| | Requirements indicated by the Defence Ministry | | | Production programme assigned to the factory | | | Actual production | | |
|---|---|---|---|---|---|---|---|---|---|
| | Shakti-man | Nis-san 1-ton | Nis-san Patrol | | | | | | |
| | S | N | NP | S | N | NP | S | N | NP |
| 1973-74: | 3,000 | 4,000 | 1,000 | 2,100 | 3,000 | 900 | 2,400 | 3,000 | 1,400 |
| 1974-75: | 4,200 | 5,000 | 1,000 | 2,000 | 3,000 | 596 | 2,000 | 2,550 | 596 |
| 1975-76: | 4,8000 | 5,600 | 1,200 | 3,071 | 3,600 | 750 | 3,151 | 3,889 | 801 |
| 1976-77: | 6,000 | 5,600 | 1,600 | 3,067 | 3,600 | 700 | 3,492 | 4,170 | 914 |

1.6. The lower production programme assigned to the factory was stated to be due to financial constraints imposed by the Apex group of the Planning Commission and lack of service orders. However, as on 31st March 1973, the Army's assessed deficiency of 3-ton vehicles was 13,497. Further, during the period 1973-74 to 1975-76, Government had procured 6,568 3-ton vehicles (cost: Rs. 44 crores approximately) from trade to meet a part of the deficiency in the Army's holdings.

1.7. The project report had estimated a requirement of 8,732 employees for optimum production of 13,200 vehicles. As on 1st April 1975, the factory had a manpower of 9,034 employees for production of about 50 per cent of the optimum production. In July 1976, Government formed a committee to review the manpower in the factory, the final outcome of which is awaited (December 1977).

1.8. Although indigenous content of 90 per cent was to be achieved in both Shaktiman and Nissan vehicles by the end of 1970-71, according to the accounts compiled by the Controller of Defence Accounts (factories) the percentages of indigenous content achieved in 1975-76 were as under:

| | |
|---|---|
| Shaktiman | 60·00 |
| Nissan 1-ton | 36·70 |
| Nissan Patrol | 32·50 |

1.9. The shortfall in indigenous content was due mainly to failure to establish indigenous production of certain components of the vehicles which had to be imported. There was also delay in the

establishment of indigenous production of grey iron and malleable iron castings required for production of the vehicles. For production to full capacity by factory 'B', it was estimated that castings worth approximately Rs. 2,96 crores per year would have to be imported. The establishment of a foundry for production of the castings with almost entirely indigenous raw materials had been sanctioned by the Government in October 1967 at a cost of Rs. 963.52 lakhs (subsequently revised to Rs. 1516.96 lakhs in December 1975). Although the intention was that there should be no substantial gap between the commissioning of factory 'B' and that of the foundry, considerable delay took place in the commissioning of the foundry. Its probable date of commissioning was revised from time to time and trickle production commenced from June 1976. The Ministry stated (January 1978) that the commissioning of the foundry was delayed due to late completion of civil construction owing mainly to delayed receipt of foundation and design data of various vital items of plant and machinery from the suppliers and changes in the design of drawings of underground galleries by the foreign consultants.

1.10. The agreements wih firms 'X' and 'Y' (concluded in 1958 and 1960 respectively were valid for a period of 10 years after which the licencee was at liberty to continue the manufacture and market the vehicles without payment of research and development charges/technical assistance fee and royalty fee to the licensor. However, both the agreements were extended several times. The agreement with firm 'X' was last extended upto December, 1978 and that with firm 'Y' upto February 1978. The main reasons for extension of the agreements were stated by the department to be:

For firms 'X' and 'Y': The firm's assistance was required for supply of certain major components of the vehicles, indigenous manufacture of which could not be established;

For firm 'Y': Nissan 1-ton vehicle had gone out of production in its country of origin and without extension of the agreement the firm could not be committed to continue supply of the factory's requirements of components for manufacture of Nissan vehicles;

For firm 'X': The firm's assistance was required for—

(a) development of a civil version of the vehicle, and

(b) development of a new type of vehicle namely, single rear-wheel version.

1.11. As a result of the extension of the agreements, research and development charges/technical assistance fee and royalty fee as provided for in the respective agreements had to be paid to firms 'X' and 'Y' during the extended period of the agreements. During the period July 1973 to December 1976 (for which payment particulars were collected in audit), the total amount paid to the foreign collaborators on this account was Rs. 99.25 lakhs.

[Paragraph 10 of the Report of the Comptroller and Auditor General of India for the year 1976-77, Union Government (Defence Services)]

**Setting up of a factory for manufacture of Vehicles**

1.12. It is seen from the Audit Paragraph that Shaktiman and Nissan Vehicles were being assembled in an Ordnance Factory 'A'—Shaktiman 3-ton from 1959, Nissan 1-ton from 1960 and Nissan Patrol from 1962 in collaboration with foreign firms 'X' and 'Y'. Such components of the vehicles as could be produced indigenously were being obtained from different Ordnance Factories largely by utilising the existing surplus capacity, and from trade. Following the Chinese aggression in 1962, the feeder factories had to undertake other priority items and, besides, large deficiencies in the holding of vehicles were revealed. It was, therefore, considered necessary to augment the facilities for manufacture of vehicles and to centralise these along with component manufacturing capacity in a self-contained unit. The existing facilities in other Ordnance Factories (including 'A') used exclusively in the manufacture of these vehicles, were also to be transferred to this unit.

1.13. In November, 1965, Government sanctioned the setting up a factory 'B' at an estimated cost of Rs. 32.06 crores with facilities for annual production of 13,200 Shaktiman and Nissan Vehicles (6,000 Shaktiman, 4,200 Nissan 1-ton and 3,000 Nissan Patrol). The sanction was subsequently revised twice—once in December 1970 to Rs. 41.53 crores and again in January 1973 to Rs. 46.84 crores.

1.14. The Committee desired to know the date on which the decision was taken to establish a self-contained centralised unit to manufacture vehicles along with components together with the details of the various steps taken to implement this decision till November, 1965, when setting up of factory 'B' was sanctioned. In a note, the Department of Defence Production informed as follows:

> "A decision was taken in July, 1963, to set up a self-contained centralised unit to manufacture vehicles along with com-

ponents in one location. In pursuance of this decision a Project Report was prepared in consultation with the Chief Planning Engineer of M/s. MAN. The proposals were discussed in the Munitions Committee meeting held on 9-1-1964 and 13-3-1964. On 12-5-1964, the Emergency Committee of the Cabinet approved in principle the proposal to set up a Vehicles Factory for production of 6000 Shaktiman and 7200 Nissan vehicles per year. The details of the proposal were then considered by the Expenditure Finance Committee on 15-5-1964. At this meeting it was noted that the estimates were not complete and it was decided that a team of recognised technical consultants should be commissioned to prepare a detailed project Report. The Government sanction for engagement of a team of consultants from MAN to finalise the Project Report was issued in January 1965. The MAN team arrived in February 1965 and stayed for two months. A team of engineers of Nissan Motors, Japan also visited India during March, 1965. The Detailed Project Report was prepared in consultation with MAN and Nissan and submitted to Government in June 1965. After scrutiny of the detailed Project Report, Expenditure Finance Committee considered the proposal on 27 August, 1965. The approval of the Finance Minister was obtained on September 18, 1965. The final Government sanction was issued in November, 1965."

1.15. According to Audit Paragraph the subsequent revisions in the estimated cost of the project, sanctioned in November 1965, were necessitated due to—

(a) Cost of procurement of additional plant and machinery not provided for in the sanction of 1965;

(b) Increase in the cost of procurement of plant and machinery already provided for in the project sanction of 1965; and

(c) Cost of machines planned originally for transfer from other factories but which could not ultimately be spared.

1.16. The Committee desired to know the reasons for not making provisions for the additional machinery in the original sanction. In a *note, the Department of Defence Production have stated:

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*Not vetted in Audit.

"The reasons for not making provision for these machines in the original sanction are given below:

(1) Out of 137 additional machines required, 66 machines were required over and above those sanctioned in 1965, as balancing equipment. The necessity for these machines were established as a result of an interim review of the Project and after visit by a team of officers of MAN works in West Germany. These machines were required on the basis of experience gained subsequently and all these machines were inescapably required for the implementation of the project.

(2) The balance 71 machines were originally included in the Project Report and the need for these machines was accepted at the time of preparation of Project Report. However, the sheets containing the list of these machines were inadvertently omitted from the final Project Report. This omission was detected after the issue of the project sanction in 1965."

1.17. The Committee desired to know the reasons for not setting up the factory till 1968, as originally proposed so as to save avoidable expenditure on the project due to the revision of the estimates. The Department of Defence Production have given the following to be the reasons for not setting up the factory by 1968, as originally stipulated:

(a) According to the Project Report, a time frame of one year and nine months from 1 April 1966 to December 1967 was provided for completion of Civil Works for the factory. However, the Engineers required four year for completion of the Civil Works *vide* Appendix 'D' of the Project Report. The production buildings with the execution of special foundations were handed over by the Engineers to factory authorities between July 1969 and December 1969.

(b) According to the Project Report, a time frame of nine months was allowed for commencement of production of vehicles from the date of completion of Civil Works in December 1967. The production of vehicles in the new factory 'B' started in June 1970 *i.e.*, six months from the date of handing over of last production building by the engineers.

## Production in the Vehicle Factory

1.18. It would be seen from the Audit Paragraph that the factory 'B' was expected to commence production after 3 years from the date of sanction of the project (*i.e.* November, 1968) and reach full production after 4½ years in all (*i.e.*, May 1970). The time schedule laid down for commencing production and achieving full target capacity could not, however, be adhered to. The assembly of three types of vehicles was commenced in the factory as follows:

| | |
|---|---|
| (i) Nissan Patrol | June, 1970 |
| (ii) Nissan 1-ton | November, 1970 |
| (iii) Shaktiman | March, 1972 |

1.19. The Committee desired to know the contemplated dates by which the factory was expected to start production and reach optimum production, when the Government sanctioned the vehicle factory in November, 1965, to manufacture 13,200 vehicles annually. The Secretary (Defence Production) informed as follows:

> "In November 1965, the Project Report was prepared and there are two contradictory statements made in the Project Report; one part of it said that the Civil Works of the project would be completed in 21 months whilst in page 28 of Appendix 'D' of the Project Report it has been stated that it will take a period of upto four years. Now this matter about time for execution was discussed by the Engineer-in-Chief who is in charge of carrying out the civil works at the periodical meeting, in which the Minister for Defence also took part and it was accepted that it was not possible to complete a complex project of this magnitude within the time frame of 21 months as envisaged and that it would have to be four years. The Engineer-in-Chief contacted the contractors and they were asked to quote the rates and they were also told that the time frame had to be brought down, but the general indication was that it was not possible to bring down the time frame from four years."

1.20. Pointing out their concern about the existence of two contradictory set of figures in the Project Report, the Committee enquired as to why a more detailed report in this regard was not obtain-

ed from the foreign collaborator. The Secretary (Defence Production) explained—

> "I am afraid I must say that that is the lacuna which we found while going through the project report. A decision was taken in consultation with the highest level in the Defence Ministry that we have to accept the period of four years as reasonable date for completing the project."

1.21. On an enquiry as to when this discrepancy was noticed, the Secretary (Defence Production) informed that it was discussed in July, 1966 and it must have been noticed at that time after the sanction was issued. He further informed:—

> "The estimate for the project building was issued in June 1966; but in the meeting held on 26 July 1966 to discuss the possibilities of reducing the time frame, it was not agreed to."

1.22. The Secretary (Defence Production) further explained that the four years' period was to commence from June, 1966, when the Civil Works were sanctioned.

**Commencement of production**

1.23. The Committee ascertained the position about the commencement of production of vehicles in the factory. The Secretary (Defence Production) explained that for Nissan and Shaktiman, they had started production in November, 1970 and March, 1972, respectively.

1.24. When enquired about the reasons for delay, the Secretary (Defence Production) explained that it was due to the fact that the transfer of the Shaktiman work, which was being done in the Gun Carriage factory in Jabalpur from 1958-59 onwards, "took time."

1.25. The Committee desired to know as to when was the decision to shift the machines taken and when the machines were actually shifted. The Secretary (Defence Production) explained—

> "The decision to have the integrated facilities at one place and shifting the line from Jabalpur factory to another place, was taken in 1964-65."

He further added:

> "We had to shift plant and equipment from existing factories to the new factory without disturbing the production of

vehicles which was already going on in the existing gun carriage factory....."

1.26. In view of the fact that the decision to shift these machines was taken prior to the issue of sanction for civil works, the Committee expressed their doubts as to this being the reason. The Secretary (Defence Production) thereupon explained as follows:—

"Yes, but we could shift the machinery physically only after the Civil works side was completed."

1.27. The Committee enquired whether this delay was not contemplated at the time of review of the Project Report to resolve the controversy as to whether the time target for completion of civil works should be 21 months or 4 years, the Secretary (Defence Production) explained:—

"I don't think that was mentioned at all because the 21 months and 4 years controversy was with respect to the completion of civil engineering works and the erection of whatever new plant and machinery had to be erected was to be done after the civil engineering structure was completed. This did not feature in the project reports."

He further added:—

"The total number of machines contemplated to be transferred from the ordnance factories to the new heavy vehicles factory did not materialise, because by that time the production in the other ordinance factories had picked up. They had diversified into other fields and these machines were kept as they were. So, we had to order new plant and equipment in lieu of the machines to be transferred.

The transfer was not carried out as contemplated at the time the project report was prepared. 448 machines were to be transferred from the existing ordnance factories. 110 could not be transferred."

1.28. Pointing out that the whole idea was to transfer all the machinery within six months, the Committee desired to know the reasons for taking time in effecting transfer of 338 machines, the Secretary (Defence Production) admitted that "There must have been delay".

1.29. The Committee desired to know the reasons for which these 110 machines could not be transferred to the new factory. In a note* the Ministry of Defence stated:

> "The 110 machines to be transferred by the existing factories were not transferred as it was stated by the existing factories concerned that these machines, could not be spared, as these were required for production of components for new projects like 105 mm Tank Gun and 105 mm Tank Gun Ammunition. Director General, Ordnance Factories deputed a team to go round these factories and verified this aspect."

1.30. About the procurement of these 110 machines, in lieu of those originally meant to be transferred, the Secretary (Defence Production) explained that these were procured partly indigenously and partly from abroad, which led to the increase in the cost of the project, from Rs. 32 crores to Rs. 41 crores.

1.31. About the time taken in the procurement of these 110 machines, the Secretary informed the Committee as follows:—

> "Whereas the project Report assumed that 6 months would be the normal time taken, between the issue of a tender and the placing of an order for plant and equipment, it took much longer than that. It took 9 to 12 months for indigenous and almost 24 months for imported equipments."

1.32. The Committee desired to know the month-wise production of all the three types of vehicles right from the dates of commencement of production for each type of vehicle in the factory. In a note, the Ministry of Defence furnished the following figures:—

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*Not vetted in Audit.

## MONTH-WISE PRODUCTION FIGURES

### SHAKTIMAN

| Month | 71-72 | 72-73 | 73-74 | 74-75 | 75-76 | 76-77 | 77-78 | 78-79 |
|---|---|---|---|---|---|---|---|---|
| April | .. | .. | 439..11* | 140 | 300 | 300 | 230 | 98 |
| May | .. | 20 | 262..13* | 110 | 210 | 300 | 300 | 150 |
| June | .. | 25 | 275 | 115 | 225 | 300 | 220 | 175 |
| July | .. | 32 | 200 | 200 | 251 | 300 | 250 | |
| August | .. | 60 | 200 | 166 | 250 | 280 | 240 | |
| September | .. | 60 | 173 : 2* | 180 | 240 | 246 | 207 | |
| October | .. | 60 | 150 | 140 | 240 | 266 | 210 | |
| November | .. | 133 : 47* | 125 | 183 | 230 | 300 | 210 | |
| December | .. | 221 : 3* | 154 | 200 | 290 | 300 | 145 | |
| January | .. | 226 | 155 | 216 | 290 | 300 | 220 | |
| February | .. | 226 | 150 | 225 | 310 | 300 | 304 | |
| March | 25 | 26 | 90 : 1* | 175 | 315 | 300 | 535 | |
| TOTAL | 25 | 1089 2373 | 2373 | 2000 | 3151 | 3492 | 3071 | |
| Army | 25 | 1089 | 2372 | 2000 | 3151 | 3229 | 3060 | |
| Civil | NIL | NIL | 1 | NIL | NIL | 263 | 11 | |
| Average | 25 | 99 | 198 (Approx) | 167 (Approx) | 263 (Approx) | 291 | 256 (Approx) | |

*Ex-GCF Vehicles issued to Army after repairs in V FJ.

## MONTH-WISE PRODUCTION FIGURES

**NISSAN PATROL**

| Month | 70-71 | 71-72 | 72-73 | 73-74 | 74-75 | 76-77 | 76-77 | 77-78 | 78-79 |
|---|---|---|---|---|---|---|---|---|---|
| April | .. | .. | 20 | 275 | 75 | 70 | 125 | 30 | 3 |
| May | .. | 35 | 35 | 175 | 75 | 30 | 100 | 50 | 60 |
| June | 8 | 68 | .. | 120 | 16 | 30 | 100 | 40 | 100 |
| July | 38 | 75 | .. | 50 | 40 | 60 | 85 | 50 | |
| August | 50 | 90 | 2 | 50 | 23 | 75 | 75 | 50 | |
| September | 48 | 70 | .. | 150 | 50 | 85 | 70 | 36 | |
| October | 16 | 90 | 88 | 125 | 36 | 64 | 60 | 40 | |
| November | 40 | 100 | 90 | 100 | 45 | 50 | 75 | 42 | |
| December | .. | 114 | 155 | 100 | 80 | 93 | 60 | 55 | |
| January | 12 | 106 | 140 | 75 | 50 | 101 | 60 | 75 | |
| February | 16 | 150 | 185 | 90 | 60 | 112 | 50 | 79 | |
| March | 100 | 156 | 185 | 90 | 46 | 31 | 54 | 3 | |
| TOTAL | 328 | 1055 | 900 | 1400 | 596 | 801 | 914 | 550 | |
| Army | 326 | 1000 | 854 | 1373 | 530 | 786 | 729 | 505 | |
| Civil | 2 | 55 | 46 | 27 | 66 | 65 | 185 | 45 | |
| Average | 37 (Approx) | 96 (approx) | 100 | 117 (approx) | 50 (approx) | 67 (approx) | 76 (approx) | 46 (approx) | |

## MONTH-WISE PRODUCTION FIGURES

### NISSAN ONE TON

| Month | 70-71 | 71-72 | 72-73 | 73-74 | 74-75 | 75-76 | 76-77 | 77-78 | 78-79 |
|---|---|---|---|---|---|---|---|---|---|
| April | .. | 5 | 255 + 5* | 200 | 150 | 260 | 375 | 260 | 84 |
| May | .. | 56 | 335 | 330 | 200 | 260 | 375 | 320 | 200 |
| June | .. | 75 | 325 | 250 | 136 | 300 | 375 | 260 | 50 |
| July | .. | 148 | 142 | 185 | 300 | 321 | 375 | 320 | |
| August | .. | 199 + 1* | 238 | 150 | 214 | 320 | 350 | 300 | |
| September | .. | 170 | 350 | 75 | 219 | 275 | 280 | 210 | |
| October | .. | 170 + 10* | 212 | 160 | 160 | 274 | 290 | 215 | |
| November | 10 | 200 | 175 | 300 | 173 | 271 | 350 | 200 | |
| December | 28 | 238 | 149 | 350 | 300 | 347 | 350 | 140 | |
| January | 62 | 236 | 202 | 314 | 302 | 360 | 350 | 220 | |
| February | 61 | 230 | 306 | 330 | 200 | 400 | 350 | 270 | |
| March | 89 | 202 | 306 | 356 | 205 | 501 | 350 | 923 | |
| TOTAL | 250 | 1919 | 2995 | 3000 | 2550 | 3889 | 4170 | 3638 | |
| Army | 250 | 1905 | 2957 | 2962 | 2490 | 3630 | 3827 | 3600 | |
| Civil | NIL | 14 | 38 | 38 | 60 | 259 | 343 | 38 | |
| Average | 50 | 160 (approx) | 250 (approx) | 250 | 213 (approx) | 324 (approx) | 348 (approx) | 303 (approx) | |

*Out of 346 Ex-GOF Nissan 1 Ton vehicles 18 vehicles after repairs were issued to Civil Indentors.

1.33. It is observed from the statement that although the Project Report envisaged the production of the vehicles at the new factory to commence in September, 1968, the production actually commenced on the following dates:

| | |
|---|---|
| Nissan Patrol | June, 1970 |
| Nissan 1-ton | November, 1970 |
| Shaktiman | March 1972 |

1.34. The reasons for the delay in the commencement of production have been indicated in a written note* as follows:

"According to the Project Report, production of vehicles in the Vehicle Factory was to commence from September, 1968. This was based on a time frame of one year and 9 months from April, 1966 to December, 1967 provided for completion of civil works for the factory. However, the engineers required four years for completion of the civil works. The production buildings with the execution of special foundations were handed over by the engineers to factory authorities between July, 1969 and December, 1969. The Project Report allowed a time frame of 9 months for commencement of production from the date of completion of civil works in December, 1967. The production of vehicles in the new factory was commenced in June, 1970, i.e. six months from the date of handing over of last production building by the engineers. While the issue of Shaktiman Vehicles from Vehicles Factory commenced in March, 1972, manufacture/assembly of major items/sub-assemblies like Engines, Gear Boxes, Transfer cases, front axles and rear axles had started at Vehicle Factory Jabalpur in October, 1970. The reasons for the delay in the commencement of production as per schedule are thus mostly due to longer time frame required by the engineers for completion of civil works. This revised time frame was accepted by Government."

1.35. The Committee desired to know the reasons for non-achievement of the monthly targets of production of the vehicles. The Secreary (Defence Produtcion) explained:

"These month-wise figures have to be correlated to the targets and the orders placed on the factory. In 1972-73, the

*Not vetted in Audit.

target production of 3,000 was achieved. Even though the capacity may have been there, we could not produce more. The demand order of the army was 3,000 and the actual production was 3,000."

1.36. The Committee recalled that when the factory was planned, the contemplated annual production was 13,200 vehicles. Though the annual estimated demand of the Army was far less, i.e. 10,500 vehicles, yet the capacity of the factory was kept at a higher level. The Committee desired to know the reasons for this. The Secretary (Defence Production) explained:

"There are two reasons. First of all there is the economy of scale. Even with the expenditure that was incurred it would have been possible to achieve 13,200. But the demand of the army was 10,500. Only a marginal capital investment was required to raise the production to 13,200."

1.37. According to the Audit Paragraph, the requirement of vehicles indicated by the Ministry of Defence in March 1973 for the years 1973-74 to 1976-77, the production programme assigned to the factory by the Director General, Ordnance Factories and the actual production achieved during these years were as follows:—

| | Requirements indicated by the Defence Ministry | | | Production programme assigned to the factory | | | Actual production | | |
|---|---|---|---|---|---|---|---|---|---|
| | Shakti-man S | Nissan 1-ton N | Nissan Patrol NP | S | N | NP | S | N | NP |
| 1973-74 | 3,000 | 1,000 | 1,000 | 2,100 | 3,000 | 900 | 2,400 | 3,000 | 1,400 |
| 1974-75 | 4,200 | 5,000 | 1,000 | 2,000 | 3,000 | 596 | 2,000 | 2,550 | 596 |
| 1975-76 | 4,850 | 5,650 | 1,200 | 3,071 | 3,600 | 750 | 3,151 | 3,889 | 801 |
| 1976-77 | 6,000 | 5,600 | 1,600 | 3,067 | 3,600 | 700 | 3,492 | 4,170 | 914 |

1.38. A study of columns 2 and 3 above shows that during all the four years, the actual production was according to the programme assigned to the factory or even more than that. The Committee desired to know the reasons for programming for the production of less quantity, when the requirements of the Army was far more. The Secretary (Defence Production) informed the Committee as follows:

"It was made on the basis of the funds allotted to us for a 5 year period, covering 1974—79."

1.39. When the Committee enquired whether it meant that less funds were made available, the Secretary (Defence Produtcion) replied in the affirmative.

1.40. Desiring to know the financial constraints, the Committee, enquired if there was a maximum limit for availability of funds. The Secretary (Defence Produtcion) informed:

> "Yes...We had it and the Apex Group asked us to work within that limit. That limit was not only for the overall Defence plan covering maintenance as well as committed new schemes, but individually also, the plan for vehicles was discussed in the Apex body, as to what were the figures."

While affirming that the factory had the capacity to produce more than what was programmed for but the reduced production was because of financial constraints only. The Secretary (Defence Producetion) added:

> "If you add up the figures in the scheme indicated by the Defence Ministry, you will find that for 1974-75 e.g. the total number of vehicles comes to about 10,200 viz. the requirement indicated by the Defence Ministry in the first column. When we come to 1975-76, you get 11600; and in 1976-77 you get 13,200 vehicles. They come under the controversial issue—about the capacity of the factory to handle 13,200 i.e. about which doubts have been expressed that they are not able, with the existing manpower and equipment, to do 13,200. Even if the Defence requirement had been approved and money provided through the Apex plan, the factory would have had to gear up itself by recruiting additional staff."

1.41. Referring to the requirements of the Army indicated in the table in para 1.37, the Committee enquired whether these reflected the requirements indicated by the Director of Services. The Director of Services replied:

> "Having done my provision reivew and having got the balance sheet in terms of assets and liabilities, then I sponsor the case for the purpose of clearance of quantity for placement of orders on the sources which produce the type of vehicles which we deal with. Those which are on the DGOF, these are, to my knowledge, cleared to the extent to which the Apex body has approved quantitatively. To that extent, final orders are placed on the DGOF. For

whose vehicles which are required from other sources, we go to the other sources, may be the private sector or the public sector; in this case the private sector."

1.42. According to the Audit paragraph, during the period 1973-74 to 1975-76, Government had procured 6,568 3-ton vehicles (Cost Rs. 44 crores approximately) from trade to meet a part of the deficiency in the Army's holdings. Pointing out that there was a financial constraint on DGOF's manufacturing programme while there was no financial constraint on buying the same thing from the market, the Committee sought specific elucidation on this position. The Director of services explained as follows:

"It has been stated here in para 7 that during 1973, 1974, 1975 and 1976 the Army had purchased 6.568 three-tonner vehicles. I think from this stems the question which we have been trying to clarify. I would like to state that the number of vehicles that have been stated to have been purchased, except for 1,000 vehicles, which were purchased through indent placed; all others pertain to indents placed earlier. It is the materialisation of the stocks during 1973, 1974. 1975 and 1976. They are earlier orders and only actual materialisation has taken place during this period, the actual deliveries were made during this period."

He further added:

"The question is, if there is a financial constraint, how did we go for purchase from civilian sources. I am answering that question by saying that the period that has been highlighted in the Audit para is the period when the vehicles were actually purchased. I am clarifying all these vehicles materialised during this period, except 1000. These were contracted on, or indents placed during 1971 or 1972. The actual materialisation took place during this period. But the contract had already taken place earlier."

1.43. The Committee desired to know the actual requirement of vehicles for 1973-74, including backlog. The Director of Services replied as follows:

"According to my balance-sheet for the October 1973 review, I had a dificiency of 12,549 three-ton vehicles. I had the

need for inducting that number of vehicles into the service."

He further added:

"When we arrive at our review at the end of each year, there is a certain amount which we have taken as assets which is already contracted with the various sources. Having taken that into account and my further requirements, come to an end product of plus or minus balance. In this particular case I arrived at a minus balance of 12,000. Having done that I cleared the figure indicated by the apex group. So, I had a deficiency of 12.549 three-ton vehicles on 1-10-1973 and I released on order for 2,505 to the DGOF."

1.44. The Committee enquired the reasons for clearing 2505 only, when the requirements were much more. The Director of Services replied that this was done as per the clearance of the Apex Body. He further added:

"On 1-10-1973 I had a deficiency of 12,549. I cleared 2505 with the DGOF on 10-7-1974. I was then left with a deficit of 10.044 uncovered. This was the position before the next review . . . On 1-10-1973 I have previous outstanding orders on the DGOF. On this particular day I had 18.866 vehicles on demand with the DGOF."

1.45. The Committee enquired whether these figures of 18,866 3-ton vehicles had been financially cleared. The Secretary (Defence Production) clarified the position as follows:

"I would like to clarify that the financial concurrence he (the Director of Services) gets is financial concurrence for his requirements and not for allocation of funds. Allocation of funds is a separate exercise done by the apex group of the Planning Commission. Even if 18,000 4/4 trucks have beeen cleared by Finance and we can give that figure to the Planning Commission and tell them that this is the figure which has been cleared and we have got to work for the production....."

1.46. The Committee enquired the reasons for the DGOF to programme for the production of 2100 Shaktiman vehicles in 1973-74 against the requirements of 3000 indicated by the Defence Ministry and more so when higher capacity was available. The Secretary

(Defence Production) explained that the Apex Body had programmed for 14,371 3-ton vehicles for the full five years period from 1974 to 1979. The Committee desired to know the break-up of these figures, year-wise and vehicles-wise. The Department of Defence Production informed as follows through a note:*

"Apex II had laid down the following targets year-wise and vehicle-wise for production of vehicles for the five year period 1974—79:

| | Shaktiman | Nissan-1-ton | Nissan Patrol |
|---|---|---|---|
| 1974-75 | 2100 | 3000 | 900 |
| 1975-76<br>1976-77<br>1977-78 | (Apex II laid down total targets for the four year period 1975-79) | | |
| 1978-79 | 12271 | 12304 | 4057 |
| | 14371 | 15304 | 4957" |

1.47. The Committee desired to know whether the purchase of vehicles made from the trade related to the type of vehicles which was not manufactured by the DGOF. The Director of Services replied as follows:—

"That is one. There may be many quantities. I must it clear that it is not our intention to hide anything. There might be certain quantity of 4X4 that was still bought by us."

1.48. When the Committee enquired whether 4X4 Shaktimans were available in the market, the representative of the Ministry of Defence replied:

"In those days, not now."

The Director of Services elucidated further as follows:

"In any case, there is no question of buying anything from them because they have stopped production of three tonne vehicle, and the type that we wish to have, they are not producing any more. So, the question of buying it from the private sector does not arise now."

1.49. The Committee desired to know as to how many vehicles were being now procured from the private trade. The Director of Services replied as follows:

"We have not bought any 3-ton vehicles from the private trade for the last three years. We are buying from DGOF.

*Not vetted in Audit.

Same is the case in respect of one-tonners. Petrol vehicles—it is mixture. These consist of jeeps and jongas. The jeeps also we have not bought from private trade for the last two years except some special types."

1.50. The Committee further enquired whether the DGOF were now in a position to meet fully the requirements of three types of vehicles. The Director of Services explained as follows:

"No. On October 1977, 8421 is the quantity which remains to be covered in respect of three-tonners. It will have to go to DGOF. About one-tonners, I had an uncovered quantity of 1450 and jongas 3879."

1.51. Referring to the backlog of about 18,866 three-tonners on 1-10-1973, the Committee pointed out that the Army's assessed deficiency of three-tonners on that date was stated to be 12,549. The Committee, therefore, desired to know the extent of the total uncovered requirements. The Director of Services informed as follows:

"18,000 is already docketed against them. 12,000 is the additional requirement that I had to order on them."

The Committee pointed out that according to Apex Body's clearances DGOF would be supplying about 14,371 three-ton vehicles by 1978-79. The Committee, therefore, desired to know as to how the Department propose to meet their balance requirement. The representative of the Ministry of Defence replied that they had to carry forward the shortage.

1.52. The Committee pointed out that when this factory was started the idea was to make it economical and to increase production. Where as major portion of the production was to be supplied to the Army, a part of the capacity was to be utilised for production of civil requirements. The Committee, therefore, desired to know the action taken by Government to implement it. The Secretary (Defence Production) explained as follows:

"This is under serious consideration of Rajadhyaksha Committee as to how to set up marketing organisation in this factory not only to meet civil trade but also to export. We do not have at the moment any marketing organisation in the Ordnance Factory for dealing with Arms and Ammunition. This is an aspect which we will have to go into when we set up an organisation."

1.53. The Committee enquired as to how the Department propose to utilise the capacity of the factory to the optimum level. The Secretary (Defence Production) replied:

> "As far as the next Plan is concerned, how much factory is going to produce will be dependent on what the Planning Commission gives. Our next immediate exercise is to take it to the level of nine or ten thousand from eight thousand and odd."

1.54. Asked whether the Department had made any study in this regard, the Secretary (Defence Production) replied that they had made a study of the manpower.

1.55. The Committee enquired whether the Department would be able to achieve optimum production if they were allowed the additional manpower. The Secretary (Defence Production) stated as follows:

> "If we are allowed to use additional manpower, as assessed by the Manpower Committee's Report we will reach a figure of 9,000 vehicles."

1.56. The Committee pointed out that according to the Audit paragraph, the decision to set up a capacity of 13,200 vehicles per annum, although in excess of the requirement of the army, was taken in order to obtain the advantage of the economy of scale. The Plan also envisaged the production of the civilian version of the Shaktiman vehicle and the generation of sufficient market demand for the Nissan vehicle but both these purposes have been defeated. The Secretary (Defence Production) explained as follows:

> "Recently we have achieved production in the neighbourhood of 7,900 to 8,000 per year, again based on the requirements of the army. But we have not gone on to produce any civil version. I think I must confess here that there has been an overestimation of the capacity figure of 13,200. With the equipments and the plant that we have, with the number of men that we have put on the job and the productivity we can get out of them, we cannot go beyond 9,000."

He further added:

> "There is a feeling that the capacity of the factory could be better utilised, apart from the target given by the army.

For that a study is already on hand, a committee has been formed with Rajadhyaksha to go into the question of the unutilised capacity of this factory."

1.57. Subsequently, the Ministry of Defence intimated the Committee through a note that a committee under the Chairmanship of Shri V. G. Rajadhyaksha, Member, Planning Commission, was appointed in August 1975, whose terms of reference were as follows:

(a) To consider the slippages in respect of major items of production.

(b) To suggest remedial measures to prevent production slippages in future.

(c) To avoid delays in establishing production of new items and augmentation of capaicty, where necessary.

(d) To examine the existing working of the organisation of Directorate General of Ordnance Factories and the Ordnance Factories and suggest re-organisation and re-structuring.

(e) Any other item which the committee may like to consider.

1.58. The Rajadhyaksha Committee had submitted its First Report—"Report of the Study Group on Vehicle Factory"—in November 1976. However, this report is stated to be still under consideration. The causes of production slippages and under-utilisation in the Vehicle Factory are understood to have been attributed by this Committee to un-economically low volume of production and major shortcomings in the preparation of the Detailed Project Report on which the Factory was sanctioned *viz.*, inadequate plant and machinery, variation in Plant and Machinery actually procured from that which was originally visualised, poor quality of some vital machines. This Committee is also understood to have made a number of recommendations for immediate action relating to Organisation, Role, Personnel Management, Quality Control, Production Finance and Control, Industrial Engineering etc. while *inter alia*, pointing out wide disparity in the Army's forecasts of requirements of vehicles and actuals.

**Deployment of Staff**

1.59. According to the Audit paragraph the Project Report had estimated a requirement of 8,732 employees for optimum produc-

tion of 13,200 vehicles. As on 1 April 1975, the factory had a manpower of 9,034 employees for production of about 50 per cent of the optimum production. In July 1976 Government formed a committee to review the manpower in the factory. The Committee enquired whether this Manpower Committee had since submitted its report. The Secretary (Defence Production) informed as follows:

> "Yes, we have received the report of the Committee. The Committee has said that for a level of production of 8,000 to 9,000 vehicles per year, while the manpower required as per the project report would be 6875, the actual manpower required would be 10,387."

He further added :

> "....the figure of manpower given in the Project Report was found to be unrealistic by the Manpower Committee which went into it."

1.60. When asked as to when was this report submitted, the representative of the Department replied that it was submitted in October 1976.

1.61. The Committee desired to know the action taken on the recommendations of the Manpower Committee, the representative of the Ministry of Defence replied that they were still under consideration.

1.62. To a pointed enquiry from the Committee as to the definite action taken on this report during the last 2 years, the Secretary (Defence Production) replied as follows :

> "The last serious step that was taken was to send Mr..... to Jubbalpur for a discussion on the subject with the General Manager and see whether for any extra items manpower is needed."

1.63. As regards the implementation of the Manpower Committee's Report, the Department of Defence Production, in a note* subsequently furnished to the Committee, intimated as follows:

> "The recommendations made by the Manpower Committee have been examined in detail by Government and it has been accepted in principle to lay down the following

*Not vetted in Audit.

revised ceiling strength of workers in the Vehicle Factory :

| | Existing strength | Recommendations of the Manpower Committee | Ceiling strength accepted by Government increase. | |
|---|---|---|---|---|
| Industrial Estt. | 8942 | 10,387 | 10,200 | +1258 |
| Non-Gazetted Officers. | 421 | 661 | 609 | 188 |
| Non-Industrial Estt. | 2209 | 2,693 | 2,612 | +403 |

The additional manpower will be inducted gradually depending upon the needs within the above ceilings. The additional manpower would be inducted mainly for working in the second shift.

The factory can raise production to 10,000 vehicles per annum without augmentation of manpower ceiling now proposed but some additional items of balancing equipment would be needed. It has been decided that while the existing deficiencies in the areas of Internal Research and Development Cell, Ancillary Development Unit, Quality Control, Maintenance etc., could be filled up, immediately, the additional staff required for increasing the production from the existing level of 7,200 vehicles to about 8,500 vehicles would be sanctioned when the Committee of Defence Planning has approved the revised higher production programme Accordingly, 524 posts of Industrial Workers, Non-Industrial workers and Non-gazetted officers would be sanctioned for making good the existing deficiencies in the manpower at Vehicle Factory....."

1.64. The Committee desired to know as to why the manpower originally estimated in the project report for optimum production ultimately proved to be inadequate. The Secretary (Defence Production) informed as follows :

".... according to the requirement of Government as assessed by the Manpower Committee, when you compare it

*Not vetted in Audit.

with the figures given in the detailed project report, that there is an increase of at least 2,000 indirect labour due to factors not directly connected with production. For instance about 119 men are employed on quality control which was not provided for in the project report."

1.65. The Committee pointed out that foreign collaborators had come to India to prepare a project report and they must have been thoroughly briefed about the Indian conditions. The representative of the Ministry of Defence informed :

"They did not know at that time."

1.66. The Committee drew attention of the representative of the Ministry of Defence to page 20 of the Appropriation Accounts of the Defence Services for 1974-75, where it has been pointed out that 'the excess staff is mainly in service and general administration sections. Further besides the recruitment of excessive staff the factory is working systematic overtime during these years involving payment of overtime bonus of Rs. 106.53 lakhs. While seeking elucidations on the aforesaid position, the Committee also desired to know the steps proposed to be taken to make the factory a viable unit. In a note*, the Department of Defence Production have stated as follows :

"The excess staff mentioned in the Appropriation Accounts 1974-75 was mainly in the areas of Stores, Inspection, Maintenance and Yard and Estate. The projections made in the Project Report for the above areas were not found adequate, (i) due to inventory level having to be maintained at a much higher level than envisaged in the Project Report, (ii) necessary emphasis having to be given on acceptance/inspection by way of increase in the number of inspection points. (iii) necessity for additional strength in the maintenance of plant and machinery, motor transport, yard and estate Additional indirect labour was also required to handle the following additional functions/activities assigned to the Factory, which were not envisaged in the Project Report—

(a) A.S.H.P. responsibility,

(b) Data Processing Section work with IDM 1401 H-Computer,

*Not vetted in Audit.

(c) Technical Committee (Vehicles) for indigenisation,

(d) Standardisation of parts amongst the verious vehicles under manufacture,

(e) Development of ancillary units.

The workers and staff in the Vehicle Factory had to be put on overtime, as the work of the Factory could not be completed during the normal working hours on account of deficiencies in manpower.

Government is already seized of the question to improve the performance of the Vehicle Factory and to make it a viable unit. A Committee under the Chairmanship of Shri V. G. Rajadhyaksha, Member Planning Commission has already been set up to make recommendations, *inter alia*, for improving the performance of Ordnance Factories including the V.F.J. The final recommendations of this Committee are awaited. In the meantime Government is taking the following steps to improve the performance of the Factory and to make its a viable unit :

(a) Additional manpower is being sanctioned for this Factory.

(b) A production programme for manufacture of 8500—9000 vehicles per annum during the next five years has been drawn up, as compared to the current production level of 7200 vehicles, which is awaiting approval of Committee of Defence Planning set up by Government.

(c) Materials management of the Factory is being toned up in the light of the recommendations of a Committee appointed to make recommendations in this regard.

(d) An internal Research & Development Cell is being set up to indigenise all stores|materials etc. for which manufacture has been undertaken under the Collaboration Agreements and to undertake design and development work to remove design defects and to make modifications for better performance of the Vehicles in Service.

(e) The concept of total Quality Control is beinfi introduced in the Factory so that quality vehicles are produced in the Factory."

1.67. The Committee desired to know the quantum of overtime allowance paid annually to the staff in the factory from the beginning to 1978-79 (upto July 1978). The Department of Defence Production furnished the following statement showing yearly percentage of overtime in terms of wages in respect of Industrial Employees, Non-Industrial Employees, Non-gazetted Officers and Medical Establishment.

| Categories | 1969-70 Overtime | Wages | Percentage | 1970-71 Overtime | Wages | Percentage | 1971-72 Overtime | Wages | Percentage |
|---|---|---|---|---|---|---|---|---|---|
| IEs | Nil | 424696 | Nil | 472535 | 2719819 | 17 (appx) | 1811639 | 7419213 | 24·5 (appx)* |
| NIEs | 106740 | 412029 | 26 (appx) | 388341 | 1739610 | 22 (appx) | 937545 | 2947093 | 32 (appx) |
| NGOs | 61995 | 227147 | 27 (appx) | 201493 | 729060 | 27·5 (appx) | 462856 | 1466896 | 32 (appx) |
| Medical | Nil | 3133 | Nil | 3037 | 27615 | 11 (appx) | 25445 | 128365 | 20 (appx) |

| Categories | 1972-73 Overtime | Wages | Percentage | 1973-74 Overtime | Wages | Percentage | 1974-75 Overtime | Wages | Percentage |
|---|---|---|---|---|---|---|---|---|---|
| IEs | 4351953 | 15917449 | 27½ (appx) | 3751937 | 23412626 | 16 (appx) | 4878406 | 37362746 | 13 (appx)* |
| NIEs | 1999882 | 4996337 | 40 (appx) | 2064103 | 7303075 | 27 (appx) | 2603089 | 9498414 | 27 (appx) |
| NGOs | 731025 | 1793215 | 40 (appx) | 705861 | 2453956 | 29 (appx) | 818995 | 2861995 | 28 (appx) |
| Medical | 52919 | 173640 | 30 (appx) | 49260 | 210120 | 23 (appx) | 70768 | 282648 | 25 (appx) |

| Categories | 1975-76 Overtime | Wages | Percentage | 1976-77 Overtime | Wages | Percentage | 1977-78 Overtime | Wages | Percentage |
|---|---|---|---|---|---|---|---|---|---|
| IEs | 5525938 | 44064578 | 12·54 (appx) | 3778277 | 47888196 | 7·9 (appx) | 3560618 | 53356563 | 6·7 (appx)* |
| NIEs | 3150329 | 11781516 | 27 (appx) | 2054954 | 12777165 | 16·8 (appx) | 2223695 | 13472386 | 16·5 (appx) |
| NGOs | 924211 | 3212817 | 29 (appx) | 676955 | 3775208 | 17·93 (appx) | 8258482 | 4510161 | 18.3 (appx) |
| Medical | 83574 | 368525 | 22·5 (appx) | 52244 | 401277 | 13 (appx) | 63825 | 443581 | 14.5 (appx) |

* The low percentage in respect of IEs as compared to other categories of staff is due to inclusion of O.T. Pay in respect of all Piece Workers in the total wages while in the case of NGO/NIEs/Medical staff to whom O.T. Pay and O.T. Bonus separately being paid and they are not included in the total wages paid.

**Under-utilisation of the machinery**

1.68. The Committee pointed out that when the staff strength was not adequate, the machinery must have been lying idle for such a long time. The Committee, therefore, desired to know as to what extent the machinery was lying idle. The representative of the Ministry of Defence stated :

> "The whole capacity is based on two shifts. The machines are not idle, one shift is idle.....I am told that in one shift (night), the utilisation is only 18 per cent. That means, 82 per cent machines are idle in one shift."

1.69. The Committee, therefore, desired to know whether after March 1972, Department of Defence Production/DGOF had received any request from General Manager of the factory for more manpower or pointing out that they were short of manpower. The Department of Defence Production informed the Committee as follows :

> "In May 1973, Vehicle Factory, Jabalpur requested DGOF for sanction of 2826 additional posts required for meeting the targets for 73-74 on the ground that the workload will increase by 50 per cent in 73-74 as compared to 72-73. In August 73, DGOF however, asked for detailed justification for the additional requirement of staff by VFJ. In October 73, VFJ requested DGOF for permission to the creation/filling of the following posts in view of the heavy workload of hand forging and machining work.
>
> | | | | |
> |---|---|---|---|
> | Blacksmith | .. | 'B' Grade .. | 4 |
> | -do- | .. | 'C' Grade .. | 5 |
> | Machinist | .. | 'C' Grade .. | 100 |
>
> DGOF agreed to the creation of 5 additional posts of Blacksmith 'C' Grade as regards filling up of posts of Machinist 'C', it requested VFJ to utilise the services of surplus Machinist 'C' in the small Arms Factory, Kanpur".

**Losses due to under-utilisation of capacity**

**1.70. The Committee desired to know the losses incurred by the factory so far by not working to the full capacity in two shifts. In**

a note*, the Department of Defence Production informed as follows:

> "The Ordnance Factories are captive production units of the Services and are primarily set up and operated as war insurance industries for production of military goods for the Army. In the present system of accounting in the Ordnance Factories, items are issued to the services at the manufacturing cost. There is no system of preparation of profit and loss account.
>
> The losses which the Vehicle Factory, Jabalpur suffered by not working to full capacity in two shifts can be computed only on certain hypothetical considerations.... the Vehicle Factory, Jabalpur could not work to full capacity in two shifts due to various reasons, like lack of manpower, lack of orders etc. It will not, however, be possible to indicate correctly the losses incurred by the Vehicle Factory, Jabalpur by not working to the full capacity in two shifts."

1.71. The Committee were informed that the real difference in manpower projections according to the project report and the Manpower Committee Report, was on the non-production side, mechanical, electrical, civil, maintenance and motor transport for which the original contemplation was 250, but according to the Manpower Committee Report, it was 1228. Then in quality control, against 347 staff, it was 877 according to the Manpower Committee Report. The Committee desired to know the reasons for the wide difference. The General Manager of the Factory explained as follows :

> "In Germany and Japan the responsibility for quality control lies largely with the sub-contractors and they exercise quality control on the items actually being manufactured by them inside their factories, while we have to do it in a greater degree here because we found that the supplies from the trade sources were not of the same quality."

**Rise in the cost of production**

1.72. The Committee pointed out that the capacity of the factory was much more than what was programmed for. Had the factory worked to full capacity there would have been economies of the scale. The Committee, therefore, desired to know the cost of production of each type of vehicle as originally envisaged and actually incurred with reasons for abnormal increase. A statement showing

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*Not vetted in Audit.

the cost of production of each of the three types of vehicles, as given in the Detailed Project Report and the actual cost incurred as intimated by the Department of Defence Production is given as below :

| | As envisaged in the Detail Project Report | Actual Cost | |
|---|---|---|---|
| | Rs. | Rs. | |
| Shaktiman . . . . . | 37,303 | 86,485 | (71-72) |
| Nissan 1 Ton . . . . . | 17,796 | 30,023 | (70-71) |
| Nissan Patrol . . . . . | 12,091 | 21,162 | (70-71) |

1.73. The Department of Defence Production have assigned the following reasons for increase in cost—

(i) The estimated cost of production given in the Project Report was based on the then envisaged capital investment of Rs. 32.05 crores since the capital investment of this project, was increased from Rs. 32.05 crores to Rs. 46.84 crores, the element on account of depreciation taken in the cost estimates increased correspondingly.

(ii) The cost of 'bought out' item was taken in the cost estimates at the prices prevailing in 1965. The cost of imported items increased in 70-71/71-72 due to the following factors :

(a) Devaluation of the Indian Rupee by 57.5 per cent in June, 1966.

(b) Adverse exchange ratio between the Indian Rupee on the one hand and the DM and Yen on the other since 1965.

(iii) The cost of production given in the Project Report was based on production of Vehicles upto the rated capacity of 13,200 Vehicles. The actual production of Vehicles has, however, not been more than 60 per cent of the rated capacity. This has also accounted for the increase in actual cost of production.

(iv) The cost indicated in the Project Report was based on the Pay roll of 1965. The pay and allowances of the wor-

kers and others have increased considerably since 1965 accounting for the increase in the cost.

(v) The slow rate of indigenisation as compared to that envisaged in the Detailed Project Report also contributed to the increase in the actual cost of production because of larger dependence on imports which were costlier.

1.74. According to the Audit Paragraph, Government have procured 6,500 3-ton vehicle (cost Rs. 44 crores approximately) from trade to meet a part of the deficiency in the Army's holdings. Accordng to Audit, cost of production of Shaktiman Vehicles in Factory 'B' *vis-a-vis* the average cost of vehicle procured from trade during 1974-75 to 1976-77, is as follows :

| Year | Unit cost of production | Average cost of vehicles from trade |
|---|---|---|
| | Rs. | Rs. |
| 1974-75 . . . . . | 1·04 lakhs | 0·68 lakhs |
| 1975-76 . . . . . | 1·25 lakhs | 0·76 lakhs |
| 1976-77 . . . . . | 1·33 lakhs | .. |

1.75. The Committee desired to know the reasons for higher cost of production of Shaktiman Vehicles in Factory 'B' during the year 1974-75 to 1976-77 as compared to the average cost of such vehicles procured from trade. In note*, the Department of Defence Production informed the Committee as follows :

"The following statement showing the cost of production of Shaktiman vehicle from 1974-75 to 1976-77 and the average cost of vehicles procured from trade may kindly be seen.

| | Shaktiman | Private Trade |
|---|---|---|
| | Rs. | Rs. |
| 1974-75 . . . . . | 104470 | 78,800 |
| 1975-76 . . . . . | 125038 | 91,250 |
| 1976-77 . . . . . | 132926 | |

*Not Vetted in Audit.

It will not be correct to compare the above two cost figures, since such a comparison will not be on "like to like" basis. The Shaktiman Vehicles have the following special characteristics/features as compared to the civil vehicles of similar classification—:

(i) Multi-fuel engines (changed over to diesel in January 1975) with M-Combustion Chamber.

(ii) 24-V starting system (hence requirements of two batteries).

(iii) Constant 4×4 drive requiring differential in Transfer Case.

(iv) Dual braking system (air brake on rear wheel, air assited hydraulic brake in the front wheel).

(v) Oil cooling system.

(vi) Oil pump in the Axle.

The above characteristics have been incorporated in Shaktiman Vehicles to meet the specific requirements of Services for operating the vehicles in difficult terrains and at high altitudes. Most of these features are quite expensive. In view of the above circumstances, cost comparison between Shaktiman vehicles and the vehicles from private trade cannot be made on "like to like" basis."

**Indigenisation of components**

1.76. The Audit Paragraph reveals that although indigenous content of 90 per cent was to be achieved in both Shaktiman and Nissan vehicles by the end of 1970-71, according to the accounts compiled by the Controller of Defence Accounts (Factories), the percentage of indigenous content achieved in 1975-76 were as under:

| | | |
|---|---|---|
| Shaktiman 3-ton | .. | 60.00 |
| Nissan 1-ton | .. | 36.70 |
| Nissan Patrol | .. | 32.50 |

1.77. The Committee desired to know the percentage of components which were originally obtained from indigenous sources and steps taken from time to time to increase this percentage. The Secretary, Department of Defence Production informed that a total number of 4,778 components were involved in the production of

Shaktiman and, at the present moment, they were importing fully ten items and partially 30 times. He further informed—

> "We have indigenised most of them excepting these ten and thirty for the Shaktiman. For the Nissan carriers, the total number of components involved is 3,522 items—items imported fully is 10 while items imported partially are 40. For the Nissan Patrol, the total number of components involved is 2,000 items; but items imported fully are 12 and items partially imported are 42."

1.78. Explaining the position about the indigenous content of these components, as existed in 1965, when the programme for manufacturing 13,200 vehicles annually was made, the Secretary, (Defence Production) informed the Committee as follows :

> "In 1965 the indigenous content (money-wise) of Shaktiman in percentage was 66; Nissan one-tonner 38 and Nissan Patrol 28."

1.79. In a note the Department has informed that the programme about the use of indigenous and imported components as contemplated in 1965, progressive rate of indigenisation actually achieved annually for all the three vehicles, was as follows :

## INDIGENISATION OF VEHICLE SHAKTIMAN PROGRAMME *Vs.* ACHIEVEMENT (VALUE-WISE)

| During the Year | Percentage of indigenisation as envisaged in the DPR after reconciliation with MES execution schedule for Civil Works. | Actual Achievement |
|---|---|---|
| 1 | 2 | 3 |
| 1966-67 . . . | 77% | 78·29 |
| 1967-68 . . . | 77% | 79·39 |
| 1968-69 . . . | 77% | 79·39 |
| 1969-70 . . . | 80·3% | 79·79 |
| 1970-71 . . . | 82·5% | 80·35 |
| 1971-72 . . . | 83·5% | 82·84 |
| 1972-73 . . . | 85% | 86·41 |
| 1973-74 . . . | 90% | 87·22 |
| 1974-75 . . . | | 90·79 |
| 1975-76 . . . | NOTE : The detail project report envisage that the indigenous content of Shaktiman Vehicle will reach 90% by the end of the 5th Year from the date of sanction of the project in Nov. 65. However, since the time for completion of civil works required by Engineers was 4 years against one year and 9 months provided in DPR, necessary adjustment have been made in Col. (2) of the above statement. | 94·83 |
| 1976-77 . . . | | |
| 1977-78 . . . | | 96·96 |

INDIGENISATION OF NISSAN CARRIER PROGRAMME *Vs.* ACHIEVEMENT
(VALUE-WISE)

| During the year | Percentage of Indigenisation as envisaged in DPR after reconciliation with MES execution Schedule for Civil Works | Actual Achievement |
|---|---|---|
| 1 | 2 | 3 |
| 1966-67 . . . | 38% | 44·72 |
| 1967-68 . | 50% | 46·79 |
| 1968-69 . | 50% | 56·33 |
| 1969-70 . . . | 76% | 57·20 |
| 1970-71 . . . | 76% | 37·47 |
| 1971-72 . . . | 87% | 59·84 |
| 1972-73 . . . | 90% | 60·10 |
| 1973-74 . . . | | 64·31 |
| 1974-75 . . . | | 67·32 |
| 1975-76 . . . | | 78·14 |
| 1976-77 . . . | NOTE : The detailed project report envisaged that the indigenous content of Nissan 1 Ton Vehicles will reach 90% in the 5th year Oct. 69—Sept. 70 from the date of sanction of the project. This assessment was based on completion of civil works in one year and 9 months. Since the Engineers required 4 years for completion of civil works, necessary adjustments in col. (2) above have been made. | 84·33 |
| 1977-78 . . . | | 91·21 |

INDIGENISATION OF NISSAN PATROL PROGRAMME *Vs.* ACHIEVEMENT
(VALUE-WISE)

| During the year | Percentage of indigenisation as envisaged in the DPR after reconcilation with MES execution schedule for Civil Works | Actual Achievement |
|---|---|---|
| 1 | 2 | 3 |
| 1966-67 . . . | 28% | 34·42 |
| 1967-68 . . . | 28% | 34·42 |
| 1968-69 . . . | 28% | 34·47 |
| 1969-70 . . . | 28% | 36·27 |
| 1970-71 . . . | 45% | 36·57 |
| 1971-72 . . . | 70% | 36·60 |
| 1972-73 . . . | 90% | 47·91 |
| 1973-74 . . . | | 57·53 |
| 1974-75 . . . | | 65·87 |
| 1975-76 . . . | | 75·26 |
| 1976-77 . . . | | 85·29 |
| 1977-78 . . . | | 90·13 |

NOTE :— The detailed project report envisaged that indigenous content of Nissan Patrol Vehicles would reach 90% in the 5th year Oct. 69—Sept. 70. This was on the basis that time for completion of civil works would be one year and 9 months. Since however, the time required by the Engineers was about 4 years, necessary adjustment have been made in Col. (2) above.

**Delay in the establishment of a foundry for the production of castings**

1.80. The establishment of a foundry for production of the castings with almost entirely indigenous raw materials had been sanctioned by Government in October, 1967 at a cost of Rs. 963.52 lakhs, which was revised in December, 1975 to Rs. 1516.96 lakhs.

1.81. Since the establishment of the foundry was envisaged at the time of sanctioning the Vehicle Factory in 1965, the Committee desired to know the reasons for the Department taking two years for according sanction for the setting up of the foundry. In a note*, the Department of Defence Production has informed as follows:

> "The establishment of Grey Iron Foundry for the production of castings, with indigenous raw materials, was envisaged at the time of sanctioning Vehicles Project in 1965. With this end in view a Protocol was signed on 25th March, 1965 with the 'B' Government for preparation of Detailed Project Report. A team from the Government of 'B' visited India in June, 1965, for preliminary investigation/ collection of data for the preparation of the Project Report. In August, 1965, a protocol was signed for supplying data to the 'B' authorities. The preliminary Report and Economics about the project was received from the 'B' authorities on 22-9-1966. After examination of the above mentioned Preliminary Report and Economics of the Project, acceptance of this Report was intimated to 'B' Government on 28th June, 1966. The detailed Project Report which was due to be received from the 'B' Government in March, 1966, was, however, received only in September, 1967. The Government sanction for the setting up of the Grey Iron Factory was thereupon issued on 16th October, 1967. It will be seen from the above that the Government sanction was issued without any delay after the receipt of the detailed project report in September, 1967."

1.82. According to the Audit Paragraph although the intention was that there should be no substantial gap between the commissioning of Factory 'B' and that of the Foundry, considerable delay took place in the commissioning of the Foundry. Probable date of commissioning of the foundry was revised from time to time and as would be seen from the Audit Paragraph, trickle production in the foundry commenced only from June, 1976. The Committee desired to know

*Not vetted in Audit.

in detail the steps taken by the Department after the issue of sanction for the foundry to ensure its timely erection and commissioning so that the castings would have been made available to Factory 'B' by 1970-71 when the production of Vehicles commenced there. In a note*, the Department of Defence Production stated as follows:—

"The 'B' authorities who prepared the Detailed Project Report had estimated the completion of the project within three years and three months from January, 1968. This assumed that the work at site was to start more or less immediately after the issue of the Government sanction and the erection activities would overlap the civil works and completed simultaneously with the civil works within three years and three months. In order to ensure that this POC was achieved, the Director General of Ordnance Factories convened a Costings-cum-Rece-cum-Siting Board from 8th November, 1967 to 15th November, 1967. The proceedings of this Siting Board were accepted by the DGOF on 24th November, 1967. The approximate estimates for the civil works were submitted by the engineers in May, 1968. Simultaneously action was taken by DGOF to prepare specifications/tender details for procurement of plant and machineries and other equipments required for this project. In spite of taking necessary timely action for ensuring that the castings would be available from this factory to Vehicle Factory, Jabalpur by 1970-71, the completion of civil works and procurement erection and commissioning of the plant and equipment took longer time due to the following unavoidable factors;

(1) General shortage of structural steel prevailing in the country at that time and non-availability and delayed receipt of steel of appropriate sections, quality and quantity.

(2) Rise in sub-soil water due to prolonged heavy rains in Jabalpur area in 1971.

(3) Collapse of a portion of steel column due to a heavy storm on 16-6-1972.

(4) Non-availability of acetylene gas for fabrication purposes.

(5) Long time taken by DGS&D in concluding A/Ts for machines indented on it, e.g. Induction Furnance inden-

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ted on DGS&D in December, 1968, but A/T was concluded by DGS&D in May, 71.

(6) Import of certain plant and equipment after the failure to locate to suppliers which despite seeking the assistance of DGS&D, took more than two years.

(7) DGTD's anxiety for locating a local source for 'penalized roller conveyors' resulted in a delay of more than a year in issuing a clearance for importing them from B.".

1.83. The Committee desired to know whether regular production in the foundry has since been started and if so, to what extent the requirements of castings for production of vehicles were being met by the foundry. In a note*, the Department of Defence Production have informed as follows:—

"Regular production in the Grey Iron Foundry has commenced from July, 1976. Out of 120 items needed for VFJ, regular production has been established in the case of 106 items. The remaining 14 items are still under trials. In terms of tonnage, out of VFJs requirements of 730 Metric Tons of castings per month, total tonnage of 180 Metric Tons per month has been achieved so far. The factory is making all out efforts to increase the level of production of items already established."

**Agreements with Foreign Firms**

1.84. According to the Audit Paragraph, the agreements with firms 'X' and 'Y' (concluded in 1958 and 1960 respectively) were valid for a period of 10 years after which the licencee was at Liberty to continue the manufacture and market the vehicles without payment of research and development charges/technical assistance fee and royalty to the licensor. The agreement with firm 'X' was last extended upto December, 1978 and that with firm 'Y' upto February, 1978. The Committee desired to know the latest proposals of the Government with regard to further continuation or otherwise of these agreements. In a note*, the Department of Defence Production stated as follows:—

"The Agreement with firm 'X' was last extended upto December, 1978. Question regarding the further continuance of this Agreement is under consideration of the Government

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and no final decision has been taken so far. In regard to Agreement with the firm 'Y', which was last extended upto February, 1978, it is proposed to extend it further to February, 1980. It is hoped this would be the last extension."

1.85. It is seen from the Audit Paragraph that the assistance of firm 'X' was required for (i) development of a civil version of the vehicle and (ii) development of a new type of vehicles namely, single rear wheel version. As the agreement with this firm in 1958 provided for development of a civil version of the vehicles also as the extra capacity set up at the factory was intended for production of a civil version, the Committee desired to know the reasons for not developing the civil version so far. The Committee also enquired as to when it was decided to take up production of the single rear wheel version in the factory and the latest position in this regard. In a note*, the Department of Defence Production have stated as follows:—

"It is true that the Collaboration Agreement concluded with firm 'X' in 1958 provided for development of a civil version of Shaktiman Vehicle, but no extra capacity was created at Vehicle Factory, Jabalpur specifically for production of civil vehicles. The VFJ project was sanctioned for setting up capacities for annual production of 13,200 vehicles—6000 Shaktiman 3 Tons and 7200 Nissan 1 Ton and Nissan 14 Ton Vehicles. The production capacity for Shaktiman Vehicles could be utilised for producing:—

(A) 6000 Shaktiman 3 Tons 4x4 Military Version

OR

(B) 3000 Shaktiman 3 Tons 4x4 Military Version

PLUS

3000 Shaktiman 3 Tons 4x2 Civil Version.

The question of developing a civil version of Shaktiman 3 Tons vehicle was considered in detail in 1972 in consultation with firm 'X'. In 1971-72, the firm 'X' offered a new modified version of the civil vehicle, for which they demanded a base price which was higher by DM 3000 (at the 1958 level) than what was provided in the original Agreement of 1958.

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*Not vetted in Audit.

The cost of production of 4x2 civil version truck in 1971-72 at Vehicle Factory, Jabalpur was estimated at Rs. 76,680 (inclusive of f.e. content of 14,311 on f.o.b. basis). The price of TATA trucks prevailing in 1971-72 for various model of civil trucks was as given below:—

*Civil Version*

| | Rs. |
|---|---|
| L. 1210/42 (4x2) Truck chassis with old engine of 100 HP | 55,807·00 |
| (ii) L. 12100/42 (4x2) Truck chassis with new engine of 125 HP. | 60,250·00 |
| (iii) L.1210D/52 (4x2) Bus Chassis with new Engine of 125 HP . | 61,469·00 |

Note: Above prices were inclusive of excise duties, but exclusive of Sales Tax etc.

The estimated cost of production of civil version of Shaktiman 3 Ton truck was thus not competitive with the Tata truck. It was, therefore, considered that a 3 Ton vehicle with a higher price as compared to the cost of private trade vehicle of higher pay load had little scope for profitable sales. Having regard to the above and the following factors, it was decided that there was no point in developing a 3 Ton Shaktiman civil version truck.

(i) Critical foreign exchange position obtaining in those years did not permit the manufacture of a vehicle with a sizeable import content as above.

(ii) The Ministry of Defence had then estimated that the future output of V.F.J. till 1981 would be absorbed by the Defence Services and, therefore, there would be no spare capacity available for undertaking production of civil version of Shaktiman civil vehicles till that time.

In view of the above considerations, the provision made in the original project sanction for plant and machinery and toolings for civil version vehicles was deleted when the project sanction was revised in 1973.

A provision for acquiring rights for manufacturing vehicles with single rear wheel was included in the Agreement in June 1972 with firm 'X', subject to the condition that this would be operative at the option of the Government of India. The technical assistance fee was payable only on

the exercise of this option, which has not yet been exercised."

**Position about the 346 vehicles transferred by Factory 'A' to Factory 'B'**

1.86. It is seen from the Audit Paragraph that while transferring the assembly line of Nissan 1-ton vehicles from Factory 'A' to Factory 'B', 346 vehicles held by the former were also transferred to the latter for issue to the army. Though full expenditure on all operations provided for in the estimates had been incurred on these vehicles by factory 'A', it was found, when these were tested at factory 'B' before issue to the Army, that some items pertaining to engine, gear box, body, driver's seat etc. required replacement, besides other minor adjustments and repairs. Factory 'B' had to spend Rs. 18.88 lakhs on these vehicles to make good the deficiencies, of which the cost of tiems replaced was about Rs. 15 lakhs.

1.87. The Committee desired to know the dates when the transfer of these 346 vehicles from factory 'A' to factory 'B' was effected and also as to when these were tested by the latter factory. In a note. the Department of Defence Production stated as follows:—

> "The 346 vehicles in question were transferred from factory 'A' to factory 'B' in batches during the period 23-1-1971 to 22-5-1973. A joint inspection by the representatives of factory 'A' and factory 'B' was conducted at the time of transfer of these vehicles. After inspection of these vehicles by Inspector of Vehicles (Central Zone), these vehicles were issued to the Army during the period 4-2-1971 to 18-7-1973."

1.88. The Committee sought explanation for the infructuous expenditure of Rs. 18.88 lakhs, which Factory 'B' had to incur in making good the deficiencies in the vehicles in question. The Secretary (Defence Production) informed as follows:—

> "These 346 represents a figure which might not have been highlighted but for the fact that the line of production changed from the Gun Carriage Factory to the Vehicles Factory. Over a period of 10 years or so, the Gun Carriage Factory had produced 23,000 vehicles, and out of them these 346 which were handed over were deficient in certain items. Even in the Vehicles Factory itself today you would have a certain number of vehicles which have to be rectified."

1.89. The Committee desired to know the year-wise rejection of these vehicles together with the reasons therefor and the different steps taken to rectify the defects from time to time. In a note, the Department of Defence Production stated as follows:—

"The year-wise rejection of 346 vehicles in question is given below:—

| | |
|---|---|
| 1967 | 5 |
| 1968 | 21 |
| 1969 | 118 |
| 1970 | 202 |
| | 346 |

The rejection of those vehicles was due to defects in Engines, water pumps, gear boxes etc. These vehicles were kept aside for repairs of the defective components etc. The repair of these vehicles could not be taken up before the transfer of the assembly line from Gun Carriage Factory, Jabalpur to Vehicle Factory, Jabalpur. These Vehicles were transferred to Vehicle Factory, Jabalpur, which took up the repair of these vehicles before issue to the Army."

1.90. The Committee were informed during evidence that a portion of Rs. 18.88 lakhs was spent on the replacement of about 500 tyres. The Committee desired to know whether these tyres were worn out or because the vehicles were lying unused and the tyres got spoiled. The representative of the Ministry of Defence replied that these tyres were worn out and he further confirmad that this position was on record.

1.91. When the Committee enquired whether these vehicles were in the use of the factory, the representative of the Ministry informed that they were partly used.

1.92. The Committee desired to know whether the defective tyres in the 346 vehicles which were finally replaced were initially old/dead tyres meant for trial runs, and if so, as to how the costing in respect of these tyres was taken into account by the Gun Carriage Factory. In a *note, the Department of Defence Production have stated:—

"The 346 vehicles transferred from G.C.F. to Vehicle Factory, Jabalpur were fitted with slave tyres to the extent of

*Not vetted in Audit.

550 Nos. as against a total number of 1730 tyres fitted to these Vehicles (five tyres with one vehicle). No provision was initially made in the assembly estimates for slave tyres. However, after initial experience of new tyres fitted on vehicles sent to the test track for trials, coming back with cuts due to repeated braking during extensive cross country trials, use of slave tyres and after trials the vehicles were fitted with new tyres for issue to the Army. At the time of transfer of assembly line from GCF to Vehicle Factory, Jabalpur, the total number of such tyres was 550 and these tyres were transferred to Vehicle Factory, Jabalpur, which was to issue these vehicles to the Army after carrying out repairs to the defective components etc., issued the Vehicles after fitting them with 550 New Tyres. The Gun Carriage Factory did not take these slave tyres into account in their costing as extra tyres, as these tyres did not constitute any extra expenditure so far as that factory was concerned."

**1.93. The Committee note that the indigenous assembly of Shaktiman 3-ton, Nissan 1-ton and Nissan Patrol vehicles was established in an ordnance factory 'A' from 1959, 1960 and 1962 respectively. The components for the assembly of these vehicles, which could be produced indigenously, were then obtained from different sister ordnance factories, largely by utilising their surplus capacity and also from trade. The Chinese aggression of 1962 revealed large shortage of these vehicles and also the ordnance factories so far feeding components for the assembly of the vehicles, were required thereafter to undertake other priority items. Consequently, it became imperative to establish a self-contained vehicle producing factory, sufficient enough to meet the defence requirements for these vehicles along with adequate capacity and facilities for manufacturing requisite components by transferring exclusive facilities for manufacturing components, then existing in the other ordnance factories to this unit. With this end in view, it was decided in July 1963 to set up a self-contained centralised unit to manufacture vehicles alongwith requisite components. The setting up of factory 'B' was, however, sanctioned by Government in November 1965, that is, after a lapse of two years. The Committee regret that even when in 1962 Government had realised that there was large-scale shortage of these vehicles for use by armed forces of the country, prompt steps were not taken to make good this shortage and it took more than two years to sanction the setting up of the factory after it was decided to do so.**

1.94. The Committee note that the sanction of November 1965 was based on the Detailed Project Report, prepared in consultation with Engineer-consultants of two motor-producing foreign firms 'X' and 'Y'. The Committee are deeply pained to find that all the parameters projected in the Project Report, viz., the time-schedule for construction of the factory and commencement and achievement of optimum production in the factory, scale for deloyment of staff, estimated cost of production, time schedule for indigenisation of components, etc., have gone awry. From the facts placed before the Committee in writing as well as during evidence, the Committee cannot help concluding that there has been utter lack of concerted and purposive approach in the establishment and execution of such an important and strategic project valuing 46.84 crores. Some of the notable features which the Committee would like to highlight are indicated in the following paragraphs.

1.95. To begin with, the project was estimated in November 1965 to cost Rs. 32.06 crores. This sanction was subsequently revised twice—once in December 1970 to Rs. 41.53 crores and again in January 1973 to Rs. 46.84 crores. The Department have advanced various reasons for the escalation of cost of the project such as increase in cost due to procurement of additional plant and machinery not envisaged initially, procurement of machines planned to be transferred from other factories but which could not ultimately be spared, and a general rise in the prices. The Committee nevertheless feel that with adequate anticipation and foresight, all these eventualities could have been visualised at the time of preparation of the Project Report with which experts of foreign companies engaged in the production of such vehicles were intimately associated.

1.96. The Committee are surprised to note that 71 machines (out of the 137 additional machines procured which partly necessitated the aforesaid cost revisions) were not provided for in the final Project Report inadvertently, thogh the need for these machines was accepted at the time of preparation of Project Report and they were originally included in tht Project Report. The Committee are not at all satisfied with the plea of inadvertence for this vital omission and they deplore this serious lapse.

1.97. A serious deviation from the basic and elementary provision made in the Project Report is that in respect of the completion of

civil works for factory 'B'. According to the Project Report, a time-frame of one year and nine months from 1 April 1966 to December 1967 was contemplated for the completion of civil works for the factory but the production buildings were handed over by the Engineers to factory authorities between July 1969 and December 1969. The Department have explained this deviation from the Project Report by stating that the Military Engineers required four years for completion of the civil works, which was also mentioned in Appendix 'D' of the Project Report. The Committee regret that two contradictory statements of time projections for the completion of the civil works for the factory with a wide difference were allowed to be incorporated in the basic document such as Project Report, without making efforts to arrive at a realistically conclusive time-frame for the purpose. The Committee would seek specific explanation for careless scrutiny of the Project Report overlooking this serious contradiction.

1.98. The Committee are further perturbed at the long delay in the commencement of production in the factory. According to the original estimates, the factory was expected to commence production by November 1968 but actual production of Nissan 1-ton and Shaktiman vehicles was commenced in November 1970 and March 1972 respectively. One of the reasons for this delay, according to the Department, is the longer time taken in the completion of civil works. The commencement of production of Shaktiman was, however, delayed by about 3-1|2 years. Giving an allowance of about 2 years on account of the delay in completion of civil works which has already been commented upon, another gap of about 1-1|2 years remains to be justified. The Department has sought to justify this delay as due to longer period taken in effecting transfer of 338 machines out of 448 machines originally planned to be transferred from the sister ordnance factories and on account of the fresh procurement of the balance 110 machines in lieu of those which could not be spared. The Committee are not convinced and consider that the delay was not justified and could have been avoided by foresight and coordinated approach on the part of the Department.

1.99. The Committee deplore yet another slippage from the estimates made in the Project Report, relating to the level of production achieved in the factory. The Committee note that keeping in view the maximum annual requirements of the Army of 10,500 vehicles (3800 Shaktiman, 4300 Nissan 1-ton vehicles and 2400 Nissan Patrol),

the factory was assigned an annual capacity of 13,200 vehicles. The excess capacity of the factory was planned in order to obtain economies of scale. The Committee are, however, surprised that the factory has failed even to meet fully the requirements of army. The Committee are deeply concerned to know from the Secretary (Defence Production) during evidence that as against the factory's annual capacity for 13,200 vehicles, it was only recently that the factory had achieved annual production in the neighbourhood of 7,900 to 8,000, i.e., only 60 per cent of the capacity of the factory.

1.100. According to the Project Report , the factory was to reach a monthly target of production of 360 Shanktiman and 400 Nissan vehicles in September 1969, that is, an year after the estimated commencement of production there. Monthly targetted production of 500 Shaktiman and 600 Nissan vehicles was to be achieved in April 1970. The Committee are dismayed to find that as against these taggets, the actual average monthly production of Shaktiman vehicles during 1971-72 to 1977-78 has ranged between 25 vehicles and 291 vehicles and that of Nissan Patrol and Nissan 1-ton has ranged between 37 and 117 and 50 and 348 respectively. Further, there have been wide variations in the monthly production of each of these vehicles. All this reveals lack of systematic effort on the part of the factory anthorities to evolve a uniform pattern of production and achieving optimum monthly as well as annual production.

1.101. Explaining the reasons for non-achievement of the monthly targets, the Secretary (Defence Production) informed that the production had to be correlated to the orders placed on the factory. In this context, the Committee observed that as against the requirements of Shaktiman indicated by the Defence Ministry during 1973-74, 1974-75, 1975-76 1976-77 for 3000, 4200, 4800 and 6000 vehicles respectively, the production programme assigned to the factory for this vehicle during these years was 2100, 2000, 3071 and 3067 vehicles. The actual production of Shaktiman during the years 1973-74, 1974-75, 1975-76 and 1976-77 was, however, 2400, 2000, 3151 and 3492 vehicles. Similar patterns have been revealed in the figures of requirements, programming and actual production of other two types of vehicles during these years. The Committee were informed that this programming was done on the basis of the allotment of funds made by Apex Body of Planning Commission. This shows that inspite of the pressing requirements of the armed forces for these vehicles and also when the factory had capacity to produce more, lesser

programmes for the production of these vehicles were assigned to the factory due to the financial constraints imposed by the Planning Commission. It is really perplaxing that such a strategic and important factory established for meeting the pressing needs of the army for the vehicles could not be pressed into optimum production, partly due to the financial constraints. The Committee are afraid that all the necessary facts about the requirements of the armed forces for these vehicles, capacity of the factory etc., were not placed before the Planning Commission by the Defence Ministry while seeking allotment of funds. The Committee would like to be enlightened in this regard.

1.102. According to the Department, apart from the financial constraints imposed by Apex Body of the Planning Commission, the other constraint responsible for the low production of the factory was the inadequacy of staff. The Committee, however, find that as against the requirement of 8,732 employees assessed by the Project Report for achieving optimum production of 13,200 vehicles, the factory had a manpower of 9,034 while the actual production achieved is about 50 per cent of the optimum figures.

1.103. The Department have fortified their contention about the inadequacy of the staff on the basis of the recommendations of the Manpower Committee. According to the Manpower Committee, for an annual level of production of 8,000 to 9,000 vehicles the actual manpower required would be 10,387, as against the staff strength of 6875, estimated by the Project Report for the same level of production. The report of the Manpower Committee was received by the Department in October 1976. The Committee were informed during evidence in July 1978 that it was still "under consideration." However, in a subsequent note received from the Department, it is stated that on examination of the recommendations of the Committee, they have evolved a principle of laying down the revised ceiling strength of workers in the factory which would entail an increase of 1849 workers in the existing strength of 11,572 of industrial establishment, non-gazetted officers and non-industrial establishment. It is further stated that with the induction of additional manpower, to be done gradually, the factory will be able to raise production to

10,000 vehicles per annum with some additional items of balancing equipment. The Committee hope that all appropriate steps for increasing the production of the factory to the optimum level, keeping in view the established principles of economy, will now the taken in right earnest so that our armed forces are not handicapped for want of this equipment. The Committee, however, desire that before the induction of new staff on the basis of the strength-ceiling now evolved, the Department should also make all possible adjustments in the positioning of staff in the service and general administration of the factory, the wing stated to be overstaffed according to Appropriation Accounts of the Ministry of Defence for 1974-75.

1.104. The Committee note that the payments of over-time allowance made to Non-Industrial employees and Non-gazetted officers was as much as 40 per cent of their wages during 1972-73, about 30 per cent of their wages in the years from 1969-70 to 1975-76 and 16—18 per cent of their wages during 1976-77 and 1977-78. They trust that with the strengthening and reorganisation of staff the payment of over-time allowance will at least be controlled, if not eliminated altogether.

1.105. The Committee note that the whole capacity in the factory is based on two shifts. They are perturbed to note that all these years the utilisation of capacity in the second shift was only to the extent of 18 per cent, which means that in this shift as much as 82 per cent of the capacity of the machines remained idle during all these years. It is a sad reflection on the functioning of this factory in which crores of tax-payer's money has been invested to meet the requirements of the armed forces. Except a request made by the factory authorities for sanction of 2826 additional posts, which also was perhaps shelved by the DGOF, the authorities concerned had failed to take timely effective steps for the optimum utilisation of costly machines when the armed forces were badly in need of the vehicles. This clearly indicates the absence of an in built system of regularly and systematically monitoring the production in the factory, identifying bottlenecks and taking remedial action. The Committee emphasise the need for establishing such a system.

1.106. The under-utilisation of the capacity of the factory has not only affected the production but there has been considerable wastage on this account. The Committee, however, regret to note that Government have been unable to furnish to the Committee the value of the loss incurred by the factory because of such under-utilisation.

1.107. The Committee note that due to the under-utilisation of the capacity of the factory, there has been very considerable increase in the cost of production of the vehicles. For instance, as against the cost of production of Rs. 37,303 for Shaktiman envisaged in the project Report, the actual cost of production during 1976-77 was Rs. 1.33 lakhs. This means that the increase in the cost of production in the case of Shaktiman has been of the order of 257 per cent which is a sad reflection on the functioning of the ordnance factory. The Committee are unable to appreciate why it is not possible for the Ordnance Factory to match the cost of production of these vehicles with the cost of procurement of these vehicles by the Department from trade which is considerably less, being only Rs. 91,250 for Shaktiman during 1975-76. The Committee strongly emphasise that the Department should make a serious attempt to locate the real causes for this high cost of production and take suitable steps for bringing them down as far as possible.

1.108. The Committee were informed during evidence that apart from the current year to year requirements of the army there was also a sizeable backlog of quantity which remained to be supplied by DGOF against orders placed on him in the past. As on 1-10-1973, whereas the assessed deficiency of 3-tonners with the army was stated to be 12,549 vehicles, the backlog which required to be supplied by DGOF against old orders was as much as 18,866. Thus, as on 1-10-1973 the total number of 3-tonners which were required to be supplied by DGOF to the ramy was 18,866. Asked as to how the Department proposed to meet the full requirements of the army in the context of the limited capacity of the factory and restricted size of programmes allocated, the representative of the Ministry of Defence replied that "they have to carry forward their shortage." The Committee would like the Ministry of Defence to examine this position in detail and its implications on the defence preparedness of the army for taking such remedial action as may be necessary.

1.109. The Committee take this opportunity to emphasise once again that avoidable delays in the setting up of factories and establishments for the production of items needed by the Defence Forces and non-utilisation or under-utilisation of production capacity in the factories even though full capacity utilisation is warranted by the projected requirements, is reprehensible as it affects our general defence capability. The Committee desire that the DGOF and the controlling authorities in the Ministry should devise a suitable control mechanism to keep a systematic close watch on the progress in setting up of the factories and on the level of production achieved and if a bottleneck comes to the notice, concerted remedial action should be taken immediately.

1.110. The Committee were informed that a committee under the Chairmanship of Shri V. G. Rajadhyaksha has already been set up to make recommendations, inter alia, for improving the performance of ordnance factories including this factory. The final recommendations of the committee are awaited. The Committee understand that Rajadhyaksha Committee had submitted its first report—"Report of the Study Group on Vehicle Factory"—in November 1976. However, this report is stated to be still under consideration. The causes of production slippages and under-utilisation in the Vehicles Factory are understood to have been attributed by this committee to uneconomically low volume of production and major shortcomings in the preparation of the Detailed Project Report on which the Factory was sanctioned, viz., inadequate plant and machinery, variation in plant and machinery actually procured from that which was originally visualised, poor quality of some vital machines etc. This committee is also understood to have made a number of recommendations for immediate action relating to Organisation, Role, Personnel Management, Quality Control, Production Finance and Control, Industrial Engineering etc., while, inter alia, pointing out wide disparity in the Army's forecasts of requirements of vehicles and actuals. The Committee would like to know the precise action taken on the recommendations of the aforesaid report of Rajadhyaksha Committee. The Committee would also anxiously await the final recommendations of the Rajadhyaksha Committee on this factory and action taken by Government on these recommendations.

1.111. The Committee note that according to the Audit paragraph, the indigenous content of 90 per cent of components was planned to be achieved in both Shaktiman and Nissan vehicles by the end of 1970-71. The initial setback in the commencement of production in the factory due to delay in the completion of civil works has had, according to the Department, the corresponding adverse affect on the achievement of these targets, which were suitably revised. The Committee regret to note that the Department failed even to adhere to these revised targets. According to the Department, the 90 per cent indigenisation of components of Shaktiman, proposed to be achieved in 1973-74 was actually achieved in 1974-75. The position in respect of the other two vehicles was very far from satisfactory. According to the revised programme, the 90 per cent indigenisation of components in respect of Nissan 1-ton and Nissan Patrol vehicles was proposed to be achieved by 1972-73 but it was actually achieved in 1977-78. The Committee desire to know the reasons for this long delay in effecting indigenisation of components in respect of Nissan 1-ton and Nissan Patrol vehicles. They will also like the Department to make all-out efforts to achive cent-per-cent indigenisation

of components of these vehicles so as to save precious foreign exchange.

1.112. Yet another abysmal feature of this project was the long and costly delay in the construction of a Foundry meant for production of castings with almost entirely indigenous raw materials for supply to the factory. Firstly, there was a gap of two years between the sanction for the factory and that for the foundry which indicates lack of planning and foresight on the part of the Department. Secondly, at the time of according sanction of Rs. 963.52 lakhs in October 1967, it was envisaged that there would be no substantial gap between the commissioning of factory 'B' and that of the foundry. But it is greatly disappointing to note that while the castings were to be made available by the Foundry to the Factory 'B' by 1970-71 regular production in the foundry could commence only from July 1976. The Department have adduced various reasons for this delay, e.g., delay in the submission of Project Report by a foreign government, general shortage of structural steel then prevailing in the country, long time taken by DGS&D in concluding A/Ts for maching indented on them, import of certain plant and equipment, DGTD's anxiety for locating a local source for 'penalized roller conveyers' etc. The Committee, however, feel that by proper planning and concerted efforts, the delay in setting up the foundry could have been avoided.

1.113. The position with regard to the level of production achieved in the foundry so far is extremely unsatisfactory. Out of the factory's monthly requirements of 730 metric tons of castings, total production of 180 metric tons per month has been achieved so far Further, production still remains to be established in respect of 14 items. The Committee would like the Department to make all-out efforts to establish production in respect of the remaining 14 items and also increase production in the foundry so as to meet the requirements of the factory in full.

1.114. The Committee note that the collaboration agreements concluded with foreign firms 'X' and 'Y' for assembly of Shaktiman and Nissan vehicles in 1958 and 1960 respectively were initially valid for a period of 10 years, after which the licencee was at liberty to continue the manufacture and market the vehicles without payment of research and development charges, technical assistance fee and royalty to the licensor. These agreements were, however, extended from time to time. According to the Department, the question of further extending the agreement with firm 'X', which was last extended upto December 1978, is under consideration of Government. As regards the agreement with firm 'Y', it was last extended upto

February 1978 and the Government propose to extend it further upto February 1980. According to Audit, the total amount paid to these firms as royalty etc. during the period July 1973 to December 1976 (for which figures were available) was Rs. 99.25 lakhs. The total payments made in this account from the beginning will obviously be much more. It is disappointing that over the last 18—20 years for which these technical collaboration agreements have been in operation, the factory was unable to develop the technical expertise to independently handle the production of this item. It also reflects adversely on the Defence, Research and Development Organisation on which enormous expenditure is being incurred every year, which has not been able to help the factory to dispense with the need for foreign expertise involving substantial outgo of foreign exchange. The Committee recommend that before taking a definite decision for extension of these agreements, Government should thoroughly assess the need for such extensions and in case it is ultimately decided to grant an extension, it should not be for a period exceeding one year and it should be made clear to the factory authorities that no further extension will be made available and they will have to take over the technical operation of the factory without foreign export assistance.

1.115. The Committee note that at the time of transfer of assembly line of Nissan 1-ton vehicles from factory 'A' to factory 'B', 346 vehicles held by the former were also transferred to the latter in batches during the period 23 January 1971 to 22 May 1973. Inspite of incurring of full expenditure on these vehicles by factory 'A' on all operations provided for in the estimates and also when these vehicles were fully inspected by the representatives of factory 'A' and factory 'B' at the time of transfer of these vehicles, factory 'B' had to spend as much as Rs. 18.88 lakhs to make good the deficiencies in them before issuing them to the Army. The Committee were informed that these vehicles were rejections out of production at factory 'A' during the period from 1967 to 1970 due to defects in engines, water pumps, gear-boxes etc. and were kept aside for repairs of the defective components etc., which could not be attended to in factory 'A' before transfer. The Committee regard it an act of negligence and carelessness on the part of factory 'A', as according to commercial prudence, the defects noticed in these vehicles should have been rectified immediately so that these could have been issued to the Army for service, instead of being allowed to remain unattended and thus locking up the capital of the factory.

NEW DELHI;
*December* 21, 1978.
*Agrahayana* 30, 1900 (*S*).

P. V. NARASIMHA RAO
*Chairman,*
*Public Accounts Committee.*

## APPENDIX

*Conclusions/Recommendations*

| Sl. No. | Para No. of the Report | Ministry/Department concerned | Conclusions/Recommendations |
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| 1 | 1.93 | Ministry of Defence (Deptt. of Defence Production) | 1.93. The Committee note that the indigenous assembly of Shaktiman 3-ton, Nissan 1-ton and Nissan Patrol vehicles was established in an ordnance Factory 'A' from 1959, 1960 and 1962 respectively. The components for the assembly of these vehicles, which could be produced indigenously, were then obtained from different sister ordnance factories, largely by utilising their surplus capacity and also from trade. The Chinese aggression of 1962 revealed large shortage of these vehicles and also the ordnance factories so far feeding components for the assembly of the vehicles, were required thereafter to undertake other priority items. Consequently, it became imperative to establish a self-contained vehicle producing factory, sufficient enough to meet the defence requirements for these vehicles along with adequate capacity and facilities for manufacturing requisite components by transferring exclusive facilities for manufacturing components, then existing in the other ordnance factories to this unit. With this end in view, it was decided in July 1963 to set up a self-contained centralised unit to manufacture vehicles along with requisite components. The setting up of factory 'B' was, however, |

sanctioned by Government in November, 1965, that is after a lapse of two years. The Committee regret that even when in 1962 Government had realised that there was large-scale shortage of these vehicles for use by armed forces of the country, prompt steps were not taken to make good this shortage and it took more than two years to sanction the setting up of the factory after it was decided to do so.

2 1.94 -do- The Committee note that the sanction of November 1965 was based on the Detailed Project Report, prepared in consultation with Engineer-consultants of two motor-producing foreign firms 'X' and 'Y'. The Committee are deeply pained to find that all the parameters projected in the Project Report, *viz.*, the time-schedule for construction of the factory and commencement and achievement of optimum production in the factory, scale for deployment of staff, estimated cost of production, time schedule for indigenisation of components, etc. have gone away. From the facts placed before the Committee in writing as well as during evidence, the Committee cannot help concluding that there has been utter lack of concerted and purposive approach in the establishment and execution of such an important and strategic project valuing 46.84 crores. Some of the notable features which the Committee would like to highlight are indicated in the following paragraphs.

3 1.95 -do- To begin with, the project was estimated in November 1965 to cost Rs. 32.06 crores. This sanction was subsequently revised twice—once in December 1970 to Rs. 41.53 crores and again in January 1973 to Rs. 46.84 crores. The Department have advanced various reasons for

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| | | | the escalation of cost of the project such as increase in cost due to procurement of additional plant and machinery not envisaged initially, procurement of machines planned to be transferred from other factories but which could not ultimately be spared, and a general rise in the prices. The Committee nevertheless feel that with adequate anticipation and foresight, all these eventualities could have been visualised at the time of preparation of the Project Report with which experts of foreign companies engaged in the production of such vehicles were intimately associated. |
| 4 | 1.96 | Ministry of Defence (Deptt. of Defence Production) | The Committee are surprised to note that 71 machines out of the 137 additional machines procured which partly necessitated the aforesaid cost revisions) were not provided for in the final Project Report inadvertently, though the need for these machines was accepted at the time of preparation of Project Report and they were originally included in the Project Report. The Committee are not at all satisfied with the plea of inadvertence for this vital omission and they deplore this serious lapse. |
| 5 | 1.97 | -do- | A serious deviation from the basic and elementary provision made in the Project Report is that in respect of the completion of civil works for factory 'B'. According to the Project Report, a time-frame of one year and nine months from 1 April 1966 to December 1967 was contemplated for the completion of civil works for the factory but the production buildings were handed over by the Engineers to factory |

authorities between July 1969 and December 1969. The Department have explained this deviation from the Project Report by stating that the Military Engineers required four years for completion of the civil works, which was also mentioned in Appendix 'D' of the Project Report. The Committee regret that two contradictory statements of time projections for the completion of the civil works for the factory with a wide difference were allowed to be incorporated in the basic document such as Project Report, without making efforts to arrive at a realistically conclusive time-frame for the purpose. The Committee would seek specific explanation for careless scrutiny of the Project Report overlooking this serious contradiction.

6 1.98 -do- The Committee are further perturbed at the long delay in the commencement of production in the factory. According to the original estimates, the factory was expected to commence production by November 1968 but actual production of Nissan 1-ton and Shaktiman vehicles was commenced in November 1970 and March 1972 respectively. One of the reasons for this delay, according to the Department, is the longer time taken in the completion of civil works. The commencement of production of Shaktiman was, however, delayed by about 3½ years. Giving an allowance of about 2 years on account of the delay in completion of civil works which has already been commented upon, another gap of about 1½ years remains to be justified. The Department has sought to justify this delay as due to longer period taken in effecting transfer of 338 machines out of 448 machines originally planned to be transferred from the sister ordnance factories and on account of the fresh procurement of the balance 110 machines

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| | | | in lieu of those which could not be spared. The Committee are not convinced and consider that the delay was not justified and could have been avoided by foresight and coordinated approach on the part of the Department. |
| 7 | 1.99 | Ministry of Defence (Deptt. of Defence Production) | The Committee deplore yet another slippage from the estimates made in the Project Report, relating to the level of production achieved in the factory. The Committee note that keeping in view maximum annual requirements of the Army of 10,500 vehicles (3800 Shaktiman, 4300 Nissan 1-ton vehicles and 2400 Nissan Patrol), the factory was assigned an annual capacity of 13,200 vehicles. The excess capacity of the factory was planned in order to obtain economies of scale. The Committee are, however, surprised that the factory has failed even to meet fully the requirements of army. The Committee are deeply concerned to know from the Secretary (Defence Production) during evidence that as against the factory's annual capacity for 13,200 vehicles it was only recently that the factory had, achieved annual production in the neighbourhood of 7,900 to 8,000, *i.e.*, only 60 per cent of the capacity of the factory. |
| 8 | 1.96 | -Do- | According the Project Report, the factory was to reach a monthly target of production of 360 Shaktiman and 400 Nissan vehicles in September 1969, that is, an year after the estimated commencement of production there. Monthly targetted production of 500 Shaktiman and 600 Nissan vehicles was to be achieved in April 1970. The Com- |

mittee are dismayed to find that as against these targets, the actual average monthly production of Shaktiman vehicles during 1971-72 to 1977-78 has ranged between 25 vehicles and 291 vehicles and that of Nissan Patrol and Nissan 1-ton has ranged between 37 and 47 and 50 and 348 respectively. Further, there have been wide variations in the monthly production of each of these vehicles. All this reveals lack of systematic effort on the part of the factory authorities to evolve a uniform pattern of production and achieving optimum monthly as well as annual production.

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| 9 | 1.101 | -Do- | Explaining the reasons for non-achievement of the monthly targets, the Secretary (Defence Production) informed that the production had to be correlated to the orders placed on the factory. In this context, the Committee observed that as against the requirements of Shaktiman indicated by the Defence Ministry during 1973-74, 1974-75, 1975-76 and 1976-77 for 3000, 4200, 4800 and 6000 vehicles respectively, the production programme assigned to the factory for this vehicle during these years was 2100, 2000, 3071 and 3067 vehicles. The actual production of Shaktiman during the years 1973-74, 1974-75, 1975-76 and 1976-77 was, however, 2400, 2000, 3151 and 3492 vehicles. Similar patterns have been revealed in the figures of requirements, programming and actual production of other two types of vehicles during these years. The Committee were informed that this programming was done on the basis of the allotment of funds made by Apex Body of Planning Commission. This shows that inspite of the pressing requirements of the armed forces for these vehicles and also when the factory had capacity to produce more, lesser |

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| 10 | 1·102 | Ministry of Defence (Department of Defence Production) | According to the Department, apart from the financial constraints imposed by Apex Body of the Planning Commission, the other constraint responsible for the low production of the factory was the inadequacy of staff. The Committee, however, find that as against the requirement of 8,732 employees assessed by the Project Report for achieving optimum production of 13,200 vehicles, the factory had a manpower of 9,034 while the actual production achieved is about 50 per cent of the optimum figures. |
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| | | | achieved in both-Shaktiman and Nissan vehicles by the end of 1970-71. The initial setback in the commencement of production in the factory due to delay in the completion of civil works has had, according to the Department, the corresponding adverse effect on the achievement of these targets, which were suitably revised. The Committee regret to note that the Department failed even to adhere to those revised targets. According to the Department, the 90 per cent indigenisation of components of Shaktiman, proposed to be achieved in 1973-74 was actually achieved in 1974-75. The position in respect of the other two vehicles was very far from satisfactory. According to the revised programme, the 90 per cent indigenisation of components in respect of Nissan 1-ton and Nissan Patrol vehicles was proposed to be achieved by 1972-73 but it was actually achieved in 1977-78. The Committee desire to know the reasons for this long delay in effecting indigenisation of components in respect of Nissan 1-ton and Nissan Patrol vehicles. They will also like the Department to make all-out efforts to achieve cent-per-cent indigenisation of components of these vehicles so as to save precious foreign exchange. |
| 20 | 1.112 | Ministry of Defence (Deptt. of Defence Production) | Yet another abysmal feature of this project was the long and costly delay in the construction of a Foundry meant for production of castings with almost entirely indigenous raw materials for supply to the factory. Firstly, there was a gap of two years between the sanction for the factory and that for the foundry which indicates lack of planning and foresight on the part of the Department. |

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| | | | Secondly, at the time of according sanction of Rs. 963.52 lakhs in October 1967, it was envisaged that there would be no substantial gap between the commissioning of factory 'B' and that of the foundry. But it is greatly disappointing to note that while the castings were to be made available by the Foundry to the Factory 'B' by 1970-71 regular production in the foundry could commence only from July 1976. The Department have adduced various reasons for this delay, *e.g.*, delay in the submission of Project Report by a foreign Government, general shortage of structural steel then prevailing in the country, long time taken by DGS&D in concluding A|Ts for maching indented on them, import of certain plant and equipment, DGTD's anxity for locating a local suorce for 'penalized roller conveyers' etc. The Committee, however, feel that by proper planning and concerted efforts, the delay in setting up the foundry could have been avoided. |
| 21 | 1·113 | -do- | The position with regard to the level of production achieved in the foundry so far is extremely unsatisfactory. Out of the factory's monthly requirements of 730 metric tons of castings, total production of 180 metric tons per month has been achieved so far. Further, production still remains to be established in respect of 14 items. The Committee would like the Department to make all-out efforts to establish production in respect of the remaining 14 items and also increase production in the foundry so as to meet the requirements of the factory in full. |
| 22 | 1·114 | -do- | The Committee note that the collaboration agreements concluded with foreign firms 'X' and 'Y' for assembly of Shaktiman and Nissan vehicles in 1958 and 1960 respectively were initially valid for |

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a period of 10 years, after which the licencee was at liberty to continue the manufacture and market the vehicles without payment of research and development charges, technical assistance fee and royalty to the licensor. These agreements were, however, extended from time to time. According to the Department, the question of further extending the agreement with firm 'X', which was last extended upto December 1978, is under consideration of Government As regards the agreement with firm 'Y', it was last extended upto February 1978 and the Government propose to extend it further upto February 1980. According to Audit, the total amount paid to these firms as royalty etc. during the period July 1973 to December 1976 (for which figures were available) was Rs. 99.25 lakhs. The total payments made on this account from the beginning will obviously be much more. It is disappointing that over the last 18-20 years for which these technical collaboration agreements have been in operation, the factory was unable to develop the technical expertise to independently handle the production of this item. It also reflects adversely on the Defence, Research and Development Organisation on which enormous expenditure is being incurred every year, which has not been able to help the factory to dispense with the need for foreign expertise involving substantial outgo of foreign exchange. The Committee recommend that before taking a definite decision for extension of these agreements, Government should thoroughly assess the need for such extensions and in case it is ultimately de-

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| | | | cided to grant an extension, it should not be for a period exceeding one year and it should be made clear to the factory authorities that no further extension will be made available and they will have to take over the technical operation of the factory without foreign expert assistance. |
| 23 | 1.115 | Ministry of Defence (Department of Defence Production) | The Committee note that at the time of transfer of assembly line of Nissan 1-ton vehicles from factory 'A' to factory 'B', 346 vehicles held by the former were also transferred to the latter in batches during the period 23 January 1971 to 22 May 1973. Inspite of incurring of full expenditure on these vehicles by factory 'A' on all operations provided for in the estimates and also when these vehicles were fully inspected by the representatives of factory 'A' and factory 'B' at the time of transfer of these vehicles, factory 'B' had to spend as much as Rs. 18.88 lakhs to make good the deficiencies in them before issuing them to the Army. The Committee were informed that these vehicles were rejections out of production at factory 'A' during the period from 1967 to 1970 due to defects in engines, water pumps, gear-boxes etc. and were kept aside for repairs of the defective components etc., which could not be attended to in factory 'A' before transfer. The Committee regard it an act of negligence and carelessness on the part of factory 'A', as according to commercial prudence, the defects notice in these vehicles should have been rectified immediately so that these could have been issued to the Army for service, instead of being allowed to remain unattended and thus locking up the capital of the factory. |



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